



# TUNYO

東洋R系列蝸輪減速電機選型手冊  
TUNYO R Series Gear Motor Hand Book

**TUNYO INTELLIGENT DEVICE CO.,LTD**

# TUNYO

The Power Of Dream

品質成就領先  
技術服務社會

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\*本公司產品因不斷改進，尺寸如有變動恕不另行通知，詳情請聯系本公司。

\*Our company's products always develop in time, if there are some changes about size, we will not inform you again. So please contact us.

**R系列蜗輪減速電機**  
**R Series RV Gear Motor**

東洋R系列電機分類 TUNYO R series motor classification



東洋通用電機



東洋高效電機



東洋變頻電機



東洋剎車電機

**R系列蝸輪減速電機**  
**R Series RV Gear Motor**

東洋R系列蝸輪減速機分類 TUNYO R series worm reducer classification



NRV



NMRV



DRV



减速机配件

### 結構特點 The structural characteristics

从0.06Kw~22Kw的功率等级有12种机座规格。

0.06Kw~7.5Kw接线盒与机座整体铝合金压铸结构，密封性好，完全符合IP56外壳防护等级标准，接线盒每侧均配备有两个出线孔。根据用户所需要出线方向可在现场临时定。

机座配有可拆卸的底脚，电机可旋转90°安装，整机结构紧凑，外观为正方形，改变了市场上传统的圆形外壳。前后端盖固定螺栓采用隐形设计。

采用低噪声静音轴承，使电机运行起来更平稳，噪音更低。

From 0.06Kw power level to 22Kw power level ,we have 12 kinds of frame size .

0.06Kw-7.5Kw junction box and the base structure of the overall aluminum die-casting, sealing, and in full compliance with IP56 enclosure rating standards, junction boxes on each side are equipped with two outlet holes. As noted in the direction needed to qualify the user in the field temporarily fixed.

Base with a removable bottom foot ,motor can be rotated 90 ° to install, compact structure, the appearance of the square, Front cover bolts using stealth design.

Low noise silent bearings, the motor running more smoothly, lower noise.

### 使用的主要原材料 The main raw material

0.06Kw~7.5Kw电机外壳为压铸铝合金，11Kw~22Kw外壳为高强度铸铁。

轴料为40Cr钢调质处理。

电磁线采用Qz-2/155、QZY-2/180。

定转子铁芯采用DW470、DW600。

0.06Kw-7.5Kw motor housing is die-cast aluminum, 11Kw-22Kw for high-strength cast iron housings.

40Cr steel shaft material for quenching.

Magnet wire using QZ-2/155, QZY-2/180.

Stator and rotor core using DW470, Dw600.

### 表面防護 Surface protection

电机外表面均采用喷塑处理。

外露螺栓均采用不锈钢材料制造。

The outer surface of the motor using spray treatment.

Exposed bolts are made of stainless steel.

## R系列蜗輪減速電機 R Series RV Gear Motor

### 絕緣 Insulation

东洋电机均采用F级绝缘系统，B级温升，最高允许环境温度为40°，最低环境温度为-15°，超过此值范围用户应提出要求。

温升考核限值为电阻法80K。

TUNYO motors are Class F insulation system, B-level rise, the maximum permissible ambient temperature of 40 °, the minimum ambient temperature of -15 °, apart from this value range ,user should request extra service.

Temperature rise test limit is resistance assessment method 80K.

### 雙頻電機的說明 The dual frequency dual pressure motor explain

本公司生产的双频双压电机，频率为50/60HZ，电压为(380V~420V)/(440V~480V)。当频率是50HZ，电机接线方式为“Y”型接法时，则输入电压在380V至420V都可使用。而电机接线方式为“△”接法时，则输入电压在220V至240V都可使用。当频率是60HZ，电机接线只能为“Y”型接法，则输入电压在440V至480V都可使用。

The company production of the dual frequency dual pressure motor ; freqency is 50/60Hz,voltage(380 ~ 420V)/(440 ~ 480V)。when the frequency is 50Hz,the motor wiring for the "Y" type connection,the input voltage connetion,the input voltage can be used in 380V to 420V, and the motor wiring for the "△"connection the input voltage can be used in 220V to 240V when the frequency is 60Hz the motor wiring is connected to "Y",then input voltage can be used in 440V to 480V.

### 統一標準 Standards

所有通用电机执行统一的制作标准。

结构及安装型式GB/T997-2008，对应标准IEC60034-7。

输出功率及安装尺寸公差GB/T4772.1-1999，对应标准IEC60072-1。

电气规范GB/T755-1987对应标准IEC60034-1。

外壳防护等级GB/T4942.1-2008对应标准IEC60034-5。

噪音GB/T10069.1-2006对应标准IEC60034-9。

振动GB/T10068-2008对应标准IEC60034-14。

All general motors implementation of a unified production standards.

Structure and mounting is GB / T997-2008, which corresponds to the standard IEC60034-7.

Output power and install dimensional tolerances is GB / T4772.1-1999, which corresponds to the standard IEC60072-1.

Electrical Code is GB / T755-1987 which corresponds to the standard IEC60034-1.

Enclosure rating is GB / T4942.1-2008 which corresponds to the standard IEC60034-5.

Noise is GB / T10069.1-2008 which corresponds to the standard IEC60034-9.

Vibration is GB / T10068-2008 which corresponds to the standard IEC60034-14.

### 工作原理 Operating principle

电动机是一种旋转式电动器具，它将电能转变为机械能。利用定子绕组和转子组成一个磁场回路，当定子绕组通过交流电时，转子鼠笼中有电流通过而产生一个旋转磁场使转子以固定的转速转动。这个转速为电机的同步转速 $n_0$ ，它的取值与电源的频率(f)及电机绕组的极数(P)有关，即 $n_0=60 \times f/P$ (转/分)。当旋转磁场使用电机转子产生感应电流时，转子磁场受到电磁力的牵引而转动，因此定子磁场与转子磁场产生一个转速差异，并且差异越大，转子上产生的电磁转矩也就越大，因此电机的输出转速与同步转速也就存在差异，这个差异以转差率(S)表示 $S=(n_0-n)/n_0 \times 100\%$ 。一般电机在额定点时转差率S为0.06左右。

The motor is a rotary electric appliance, it is converted to electrical energy to mechanical energy. Use of the stator winding ,The group consisting of a magnetic circuit and the rotor, stator winding through when AC, the rotor cage has Current generating a rotating magnetic field of the rotor is rotated by a fixed speed. The speed of electricity Machine synchronous speed  $n_0$ , its value and power of the frequency (f) and Poles (P) on the motor windings, That  $n_0 = 60 \times f / P$  (r / min). When the rotating magnetic field induced current of the motor rotor, the rotor magnetic

Field by the electromagnetic force and rotates, so the stator and the rotor magnetic field produces a speed Difference, and the greater the difference, the electromagnetic torque on the rotor produced greater, the output of the motor Speed a nd synchronous speed will differ, this difference in slip (S) said  $S = (n_0 - n) / n_0 \times 100\%$ .

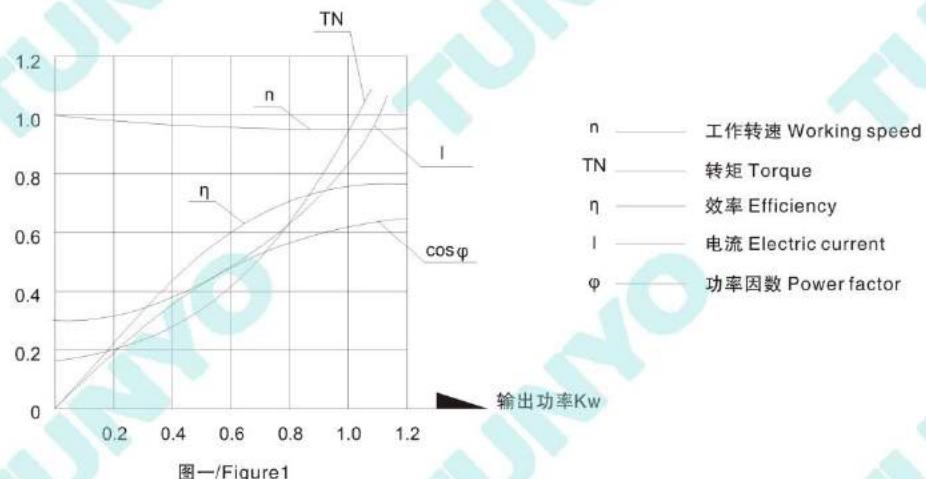
General Motor slip at the rated point S is about 0.06.

### 電動機的運行特性 The operating characteristics of motor

电动机在带负载运行时，其实际输出功率(P)大小的恒功率等于实际负载的需求功率。负载的增加或减少，电机的输出功率随之增加或减少。电机在不同工作点时，转速n、转矩TN、输出功率P、功率因数COSΦ、效率η、电流I等将随着负载的变化而变化(如图1)，这种变化是电机运行特性决定的。

When the motor is running with load, the actual output power (P) is equal to the actual power load demand. Increasing or decreasing the load, the output power of the motor affect accordingly. When Motor work in different working points, the speed n, the torque TN, the output power P, the power factor COSφ, efficiency η, electric current I, will change as the load changes (Figure 1), this change is to run the motor characteristics decision.

電機工作原理 Motor operation



图一/Figure1

从图1中可看出，从空载到加载，随着电机输出功率的增大，电机转速(n)稍有下降。转矩(M)随着输出功率增大而相对增大。效率(η)、功率因素(COSφ)当输出功率增大到50%额定值以上时保持基本稳定。

As we can be seen from Figure 1, from empty-load to load, the output power increasesing, the motor rotation Speed ( n ) decreased slightly. Torque ( M ) increases as the output power is relatively increased. Efficiency ( η ), the power factors ( COSφ ) remain stable when the output power is increased to more than 50% of rated value.

二個轉矩特性 The two torque characteristics

1、額定轉矩TN/The rated torque TN

电机在额定电压下以额定转速( $n_0$ )运行，输出额定功率( $P$ )时，电机转轴上输出的

$$\text{转矩: } TN = \frac{P}{2 \times \pi \times n} \text{ 牛顿·米}$$

Motor rated speed ( $n_0$ ) is running at rated voltage, Rated output power ( $P$ ), the output of the motor shaft

$$TN = P / 2 \times \eta \times n / 60 (\text{orque:Nm})$$

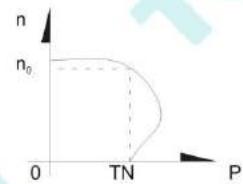


图2/Figure2

## R系列蜗輪減速電機 R Series RV Gear Motor

### 電機工作原理 Motor operation

#### 2、最大轉矩Tmax / the maximum torque Tmax

电动机带动负载的能力。

如果  $TL > Tmax$  电机将会因带不动负载而停转。TL为负载转矩。 $Tmax = KV_1^2 \frac{1}{2 \times 20}$

Motor driven load.

If  $TL > Tmax$  motor will not move due to the load with The stall. TL is the load torque.

$Tmax = KV_1 2/1/2 \times 20$

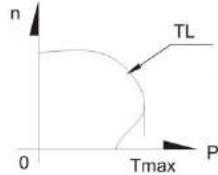


图3 / Figure 3

对于三相电动机，同时按相同倍数提高或降低电动机的额定电压和频率是允许的。需要说明的是：当电动机工作电压偏离额定值时，电动机的起动转矩TN、最小转矩Tn、最大转矩Tmax等将受到影响。力矩大小与电压的平方成正比。

For three-phase motors, while increasing multiples of the same Or reduce the motor's rated voltage and frequency are allowed. It should be noted that: When the motor work

For three-phase motors, while increasing multiples of the same Or reduce the motor's rated voltage and frequency are allowed. It should be noted that: When the motor work

Voltage excursions, the motor starting torque TN, minimum torque Tn, maximum torque Tmax Etc. will be affected.

The size of the torque proportional to the square of the voltage.

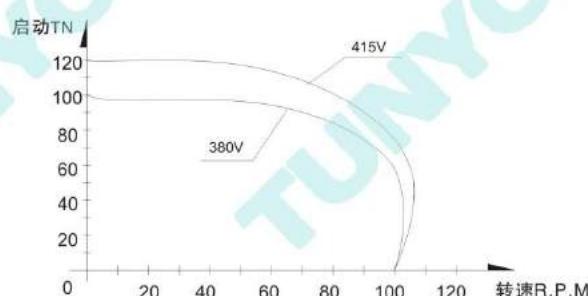


图4/Figure3

運行環境 The operating environment

一般用途的电动机，其定额应为最大连续定额，并能按S1工作制运行。

S1-连续工作制：电动机在恒定负载下运行，运行时间足以达到热稳定。

S2-短时工作制：电动机在恒定负载下，按给定的时间运行，改时间不足以达到热稳定，随之断电，然后停止转动有足够时间，使电动机冷却到环境温度。

在额定电压，额定频率下，使用的环境空气温度不超过 $-15 \leq Q \leq 40^{\circ}$

海拔高度不超过1000米。绝缘等级F级，定子绕组温升考核80K。外壳防护：IP54、IP55、IP56。冷却方式：IC411。

本公司生产的电动机均为S1工作制。外壳防护如无特殊要求均按IP54生产。

过载系数： $\lambda = \frac{T_{max}}{T_N}$

General-purpose motor, the maximum continuous rating should be fixed, and can run in S1 duty.

S1-continuous duty: the motor running at constant load, running time sufficient to achieve thermal stability.

S2-short-time work: the motor at a constant load, running at a given time, the time

Sufficient to achieve thermal stability, along with power, and there is sufficient time to stop the rotation, to the ring of the electric cooling Ambient temperature.

At rated voltage, rated frequency, ambient air temperatures do not exceed  $-15 \leq Q \leq 40^{\circ}\text{C}$  Not more than 1000 meters above sea level. Insulation class F, the stator winding temperature rise assessment 80K. Anti shell

Proof: IP54, IP55, IP56. Cooling method: Ic411.

The company produces both S1 motor duty. Enclosure protection according to IP54 if no special requirements Produce.

Overload factor: $\lambda = T_{max} / T_N$

注意 Note

1、三相电动机的Tmax和电压的平方成正比，所以对电压的波动很敏感，使用时要注意电压的变化。

Three-phase motor is proportional to the square of the voltage and Tmax, it is sensitive to voltage fluctuations, Note the use of the voltage variation.

2、工作时一定使负载的转矩 $T_L < T_{max}$ ，否则电机将会停转或过热而烧毁。

Must make the work load torque  $T_L < T_{max}$ , otherwise the motor will stall or overheat.

## R系列蜗輪減速電機 R Series RV Gear Motor

### 電機應用規範 The motor application speacification

#### ◆ 頂定电压和频率 The rated voltage and frequency

每种型号的电机都规定了额定工作电压及频率。铭牌上有标示。电机在使用时要检查电源电压和频率与电机规定值相符，如果不符将不能保证电机的性能指标有效的发挥，严重时将会造成一定的人身伤害。

Each model provides motors are rated working voltage and frequency. There are marked on the nameplate. Motor When used to check the value of the supply voltage and frequency match the motor provides power if the match can not be guaranteed Performance machine to function effectively, will cause some serious bodily injury.

所有电动机的电源电压，不得超过或降低  $\pm 5\%$ ，频率不得偏离额定的  $\pm 1\%$ 。

All motor supply voltage must not exceed or reduce  $\pm 5\%$ , shall not deviate from the nominal frequency  $\pm 1\%$ .

三相异步电动机在额定频率下可按△形接线和Y形接线。电动机在这两种接法的额定值下运行将保持完全相同的运行特性。按照国家电源标准，三相异步电动机3Kw及以下按Y形接线380/50Hz。△形接线220V/50Hz提供。4Kw及以上按△形接线，380/50Hz提供。如果用户有其它特殊要求，订货时可提出。

Three-phase asynchronous motors at rated frequency can be Y-shaped wiring and wiring. Motors which in this ratings run two configurations will remain the same operating characteristics. According to the national power standards, Three-phase asynchronous motor 4Kw and below by a Y-shaped junction 380/50Hz. -shaped wiring 220/50Hz mention Supply. 4Kw and over by  $\triangle$ -shaped wiring, 380/50Hz available. If you have other special requirements, please let us know when making the order.

**TUNYO**



東洋通用電機

TUNYO YS GENERAL MOTORS

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

DESIGN PHILOSOPHY: To follow the law, but always beyond.

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

R系列 Y S 通用 電 機  
R Series YS General Motors



型號說明 General Information

<b>YS</b>	-	<b>71</b>	<b>2</b>	-	<b>4</b>	-	<b>750</b>	-	<b>B14</b>	-	<b>GW</b>
電機種類		機座號						安裝方式			
YS:通用電機 YSM:通用剎車電機		56 100L 63 112M 71 132S 80 160M 90S 160L 90L 180M						B3:臥式安裝 B14:立式小法蘭安裝 B34:臥式小法蘭安裝 B5:立式大法蘭安裝 B35:臥式大法蘭安裝			
		鐵芯代號						其他			
		1 2 3 4						GW:高溫 FS:防水			
		極數									
		90W 22000W									



**R系列 Y S通用電機**  
**R Series YS General Motors**

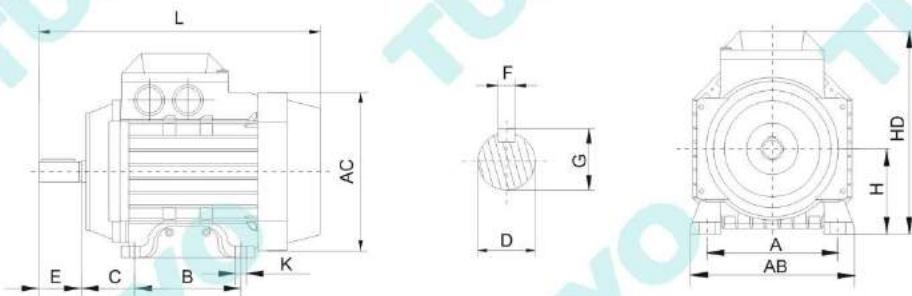
**YS系列技術參數 YS series motor technology parameters**

型号 TYPE	额定功率 RATED OUTPUT		额定转速 RATED SPEED	效率 EFFICIENCY	功率因数 POWER FACTOR	额定电流 RATED CURRENT	额定转矩 RATED TORQUE	堵转转矩 LOCKED ROTOR TORQUE	最大转矩 MAXIMUM TORQUE	堵转电流 LOCKED ROTOR CURRENT
	Kw	HP								
YS-711-6	0.18	1/4	910	59.0	0.61	0.76	1.89	2.0	2.0	5.5
YS-712-6	0.25	1/3	910	63.0	0.62	0.97	2.62	2.0	2.0	5.5
YS-801-6	0.37	1/2	910	68.0	0.62	1.33	3.88	2.0	2.0	5.5
YS-802-6	0.55	3/4	910	71.0	0.64	1.84	5.77	2.0	2.0	5.5
YS-90S-6	0.75	1	920	75.9	0.68	2.30	7.79	2.0	2.1	5.5
YS-90L-6	1.1	1.5	920	78.1	0.70	3.23	11.4	2.0	2.1	6.0
YS-100L-6	1.5	2	949	79.8	0.73	3.78	15.1	2.0	2.1	6.5
YS-112M-6	2.2	3	955	81.8	0.74	5.36	22.0	2.0	2.1	6.6
YS-132S-6	3	4	968	83.3	0.74	7.20	29.6	2.0	2.1	6.8
YS-132M1-6	4	5.5	968	84.6	0.74	9.46	39.5	2.0	2.1	6.8
YS-132M2-6	5.5	7.5	968	86.0	0.75	12.7	54.3	2.0	2.1	7.0
YS-160M-6	7.5	10	970	87.2	0.79	16.2	73.8	2.0	2.1	7.0
YS-160L-6	11	15	970	88.7	0.80	23.1	108.3	2.0	2.1	6.2
YS-180L-6	15	20	975	89.7	0.81	30.9	146.9	2.0	2.1	7.3

**R系列 Y S通用電機**  
**R Series YS General Motors**

**YS系列安裝尺寸 Installation dimension of YS series motor**

◆B3(56~180L)

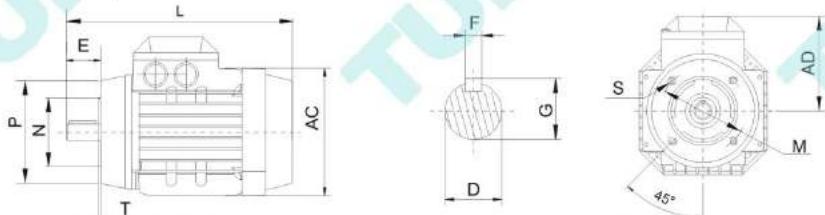


机座号 Frame size	外型及安装尺寸 Installation Dimensions												
	A	B	C	D	E	F	G	H	K	AB	AC	HD	L
56	90	71	36	ø 9	20	3	10.5	56	ø 5.8	107	102×102	145	190
63	100	80	40	ø 11	23	4	12.5	63	ø 7	122	120×120	167	220
71	112	90	45	ø 14	30	5	16	71	ø 7	136	130×130	180	245
80	125	100	50	ø 19	40	6	21.5	80	ø 10	154	145×145	190	265
90S	140	100	56	ø 24	50	8	27	90	ø 10	180	160×160	205	316
90L	140	125	56	ø 24	50	8	27	90	ø 10	180	160×160	205	326
100L	160	140	63	ø 28	60	8	31	100	ø 12	205	185×185	240	405
112M	190	140	70	ø 28	60	8	31	112	ø 12	235	200×200	270	455
132S	216	140	89	ø 38	80	10	41	132	ø 12	261	245×245	310	470
132M	216	178	89	ø 38	80	10	41	132	ø 12	261	245×245	310	510
160M	254	210	108	ø 42	110	12	45	160	ø 14.5	320	320×320	450	730
160L	254	254	108	ø 42	110	12	45	160	ø 14.5	320	320×320	450	770
180M	279	241	121	ø 48	110	14	51.5	180	ø 14.5	355	360×360	500	790
180L	279	279	121	ø 48	110	14	51.5	180	ø 14.5	355	360×360	500	930

R系列YS通用電機  
R Series YS General Motors

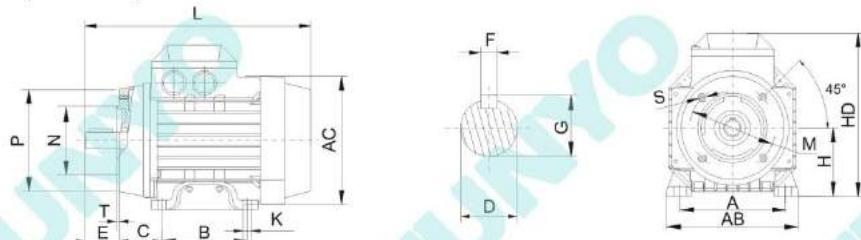
YS系列安裝尺寸 Installation dimension of YS series motor

◆B14(56~112M)



机座号 Frame size	外型及安装尺寸 Installation Dimensions											
	D	E	F	G	M	N	P	S	T	AC	AD	L
56	ø9	20	3	10.5	65	50	80	M5	2.5	102×102	91	190
63	ø11	23	4	12.5	75	60	90	M5	2.5	120×120	104	220
71	ø14	30	5	16	85	70	105	M6	2.5	130×130	107	245
80	ø19	40	6	21.5	100	80	110	M6	3.0	145×145	115	265
90S	ø24	50	8	27	115	95	120	M8	3.0	160×160	122	316
90L	ø24	50	8	27	115	95	120	M8	3.0	160×160	122	326
100L	ø28	60	8	31	130	110	155	M8	3.5	185×185	137	405
112M	ø28	60	8	31	130	110	160	M8	3.5	200×200	155	455

◆B34(56~112M)



机座号 Frame size	外型及安装尺寸 Installation Dimensions																	
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	HD	L
56	90	71	36	ø9	20	3	10.5	56	ø5.8	65	50	80	M5	2.5	107	102×102	145	190
63	100	80	40	ø11	23	4	12.5	63	ø7	75	60	90	M5	2.5	122	120×120	167	220
71	112	90	45	ø14	30	5	16	71	ø7	85	70	105	M6	2.5	136	130×130	180	245
80	125	100	50	ø19	40	6	21.5	80	ø10	100	80	110	M6	3.0	154	145×145	190	265
90S	140	100	56	ø24	50	8	27	90	ø10	115	95	120	M8	3.0	180	160×160	205	316
90L	140	125	56	ø24	50	8	27	90	ø10	115	95	120	M8	3.0	180	160×160	205	326
100L	160	140	63	ø28	60	8	31	100	ø12	130	110	155	M8	3.5	205	185×185	240	405
112M	190	140	70	ø28	60	8	31	112	ø12	130	110	160	M8	3.5	235	200×200	270	455



**TUNYO**



## 東洋高效電機

TUNYO YE HIGH EFFICIENCY MOTOR

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

DESIGN PHILOSOPHY: To follow the law, but always beyond.

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

**TUNYO INTELLIGENT DEVICE CO.,LTD**

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R 系列 YE 高效電機  
R Series YE High Efficiency Motor



型號說明 General Information

YE	-	71	2	-	4	-	750	-	B14	-	GW
電機種類						安裝方式					
YE:高效電機 YEM:高效剎車電機						B3:臥式安裝 B14:立式小法蘭安裝 B34:臥式小法蘭安裝 B5:立式大法蘭安裝 B35:臥式大法蘭安裝					
56 100L	機座號	56	100L	1	極數	2	功率	90W	其他		
63 112M		63	112M	2		4		22000W	GW:高溫 FS:防水		
71 132S		71	132S	3		6					
80 160M		80	160M	4							
90S 160L		90S	160L								
90L 180M		90L	180M								



**R 系列 YE 高效電機**  
**R Series YE High Efficiency Motor**

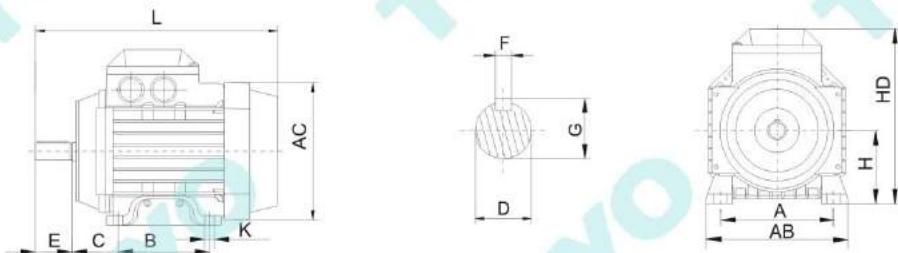
**YE系列技術參數 YE Series Technical parameters**

型号 TYPE	额定功率 RATED OUTPUT		额定转速 RATED SPEED	效率 EFFICIENCY	功率因数 POWER FACTOR	额定电流 RATED CURRENT	额定转矩 RATED TORQUE	堵转转矩 LOCKED ROTOR TORQUE	最大转矩 MAXIMUM TORQUE	堵转电流 LOCKED ROTOR CURRENT
	Kw	HP								
YE-90S-6	0.75	1	935	78.9	0.71	2.03	7.66	2.0	2.1	6.0
YE-90L-6	1.1	1.5	945	81.0	0.73	2.83	11.1	2.0	2.1	6.0
YE-100L-6	1.5	2	949	82.5	0.73	3.78	15.1	2.0	2.1	6.5
YE-112M-6	2.2	3	955	84.3	0.74	5.36	22.0	2.0	2.1	6.6
YE-132S-6	3	4	968	85.6	0.74	7.20	29.6	2.0	2.1	6.8
YE-132M1-6	4	5.5	968	86.8	0.74	9.46	39.5	2.0	2.1	6.8
YE-132M2-6	5.5	7.5	968	88.0	0.75	12.7	54.3	2.0	2.1	7.0
YE-160M-6	7.5	10	970	89.1	0.79	16.2	73.8	2.0	2.1	7.0
YE-160L-6	11	15	970	90.3	0.80	23.1	108.3	2.0	2.1	6.2
YE-180L-6	15	20	975	91.2	0.81	30.9	146.9	2.0	2.1	7.3

**R 系列 YE 高效電機**  
**R Series YE High Efficiency Motor**

**YE系列安裝尺寸 YE series installation size**

◆B3(80M~180L)

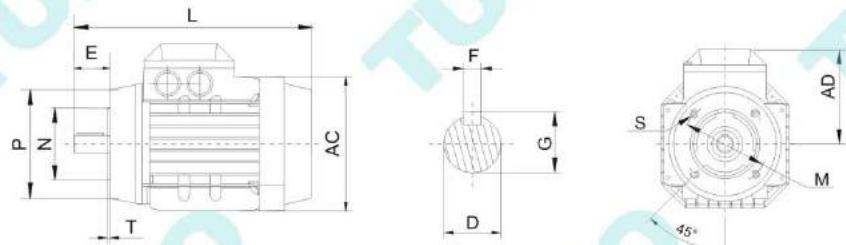


机座号 Frame size	外型及安装尺寸 Installation Dimensions													L IE3
	A	B	C	D	E	F	G	H	K	AB	AC	HD		
80M	125	100	50	ø 19	40	6	21.5	80	ø 10	154	145×145	190	305	
90S	140	100	56	ø 24	50	8	27	90	ø 10	180	160×160	205	340	
90L	140	125	56	ø 24	50	8	27	90	ø 10	180	160×160	205	365	
100L	160	140	63	ø 28	60	8	31	100	ø 12	205	185×185	240	405	
112M	190	140	70	ø 28	60	8	31	112	ø 12	235	200×200	270	455	
132S	216	140	89	ø 38	80	10	41	132	ø 12	261	245×245	310	470	
132M	216	178	89	ø 38	80	10	41	132	ø 12	261	245×245	310	510	
160M	254	210	108	ø 42	110	12	45	160	ø 14.5	320	320×320	450	730	
160L	254	254	108	ø 42	110	12	45	160	ø 14.5	320	320×320	450	770	
180M	279	241	121	ø 48	110	14	51.5	180	ø 14.5	355	360×360	500	790	
180L	279	279	121	ø 48	110	14	51.5	180	ø 14.5	355	360×360	500	930	

R 系列 YE 高效電機  
R Series YE High Efficiency Motor

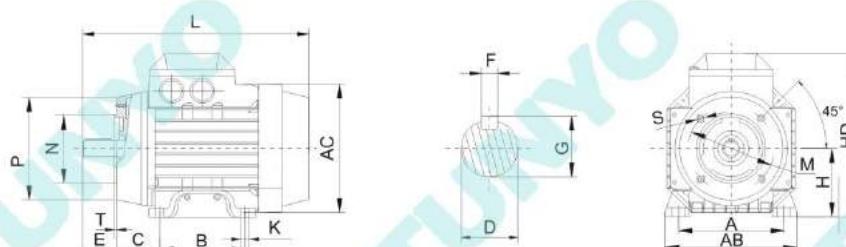
YE系列安裝尺寸 YE series installation size

◆B14(80M~112M)



机座号 Frame size	外型及安装尺寸 Installation Dimensions												L IE3
	D	E	F	G	M	N	P	S	T	AC	AD		
80M	ø19	40	6	21.5	100	80	110	M6	3.0	145×145	115	305	
90S	ø24	50	8	27	115	95	120	M8	3.0	160×160	122	340	
90L	ø24	50	8	27	115	95	120	M8	3.0	160×160	122	365	
100L	ø28	60	8	31	130	110	155	M8	3.5	185×185	137	405	
112M	ø28	60	8	31	130	110	160	M8	3.5	200×200	155	455	

◆B34(80M~112M)

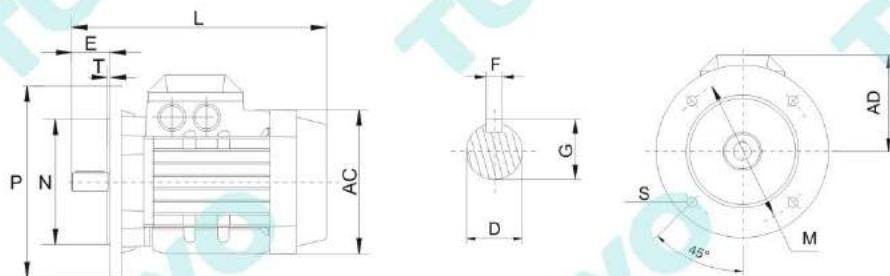


机座号 Frame size	外型及安装尺寸 Installation Dimensions														L IE3			
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	HD	
80M	125	100	50	ø19	40	6	21.5	80	ø10	100	80	110	M6	3.0	154	145×145	190	305
90S	140	100	56	ø24	50	8	27	90	ø10	115	95	120	M8	3.0	180	160×160	205	340
90L	140	125	56	ø24	50	8	27	90	ø10	115	95	120	M8	3.0	180	160×160	205	365
100L	160	140	63	ø28	60	8	31	100	ø12	130	110	155	M8	3.5	205	185×185	240	405
112M	190	140	70	ø28	60	8	31	112	ø12	130	110	160	M8	3.5	235	200×200	270	455

R 系列 YE 高效電機  
R Series YE High Efficiency Motor

YE系列安裝尺寸 YE series installation size

◆B5(80M~180L)

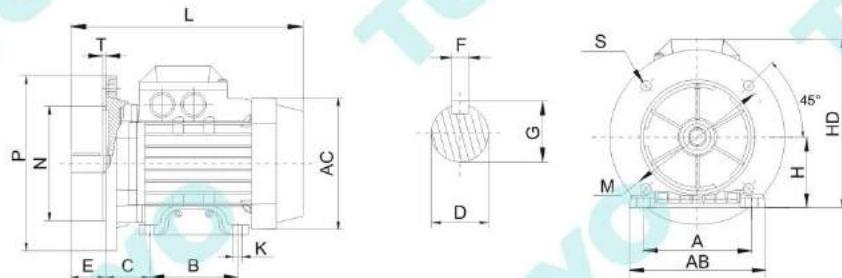


机座号 Frame size	外型及安装尺寸 Installation Dimensions												L IE3
	D	E	F	G	M	N	P	S	T	AC	AD		
80M	ø 19	40	6	21.5	165	130	200	12	3.5	145×145	115	305	
90S	ø 24	50	8	27	165	130	200	12	3.5	160×160	122	340	
90L	ø 24	50	8	27	165	130	200	12	3.5	160×160	122	365	
100L	ø 28	60	8	31	215	180	250	14.5	4	185×185	137	405	
112M	ø 28	60	8	31	215	180	250	14.5	4	200×200	155	455	
132S	ø 38	80	10	41	265	230	300	14.5	4	245×245	180	470	
132M	ø 38	80	10	41	265	230	300	14.5	4	245×245	180	510	
160M	ø 42	110	12	45	300	250	350	18.5	5	320×320	290	730	
160L	ø 42	110	12	45	300	250	350	18.5	5	320×320	290	770	
180M	ø 48	110	14	51.5	300	250	350	18.5	5	360×360	320	790	
180L	ø 48	110	14	51.5	300	250	350	18.5	5	360×360	320	930	

R 系列 YE 高效電機  
R Series YE High Efficiency Motor

YE系列安裝尺寸 YE series installation size

◆B35(80M~180L)



机座号 Frame Size	外型及安装尺寸 Installation Dimensions																	
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	HD	L IE3
80M	125	100	50	ø19	40	6	21.5	80	ø10	165	130	200	12	3.5	154	145×145	190	305
90S	140	100	56	ø24	50	8	27	90	ø10	165	130	200	12	3.5	180	160×160	205	340
90L	140	125	56	ø24	50	8	27	90	ø10	165	130	200	12	3.5	180	160×160	205	365
100L	160	140	63	ø28	60	8	31	100	ø12	215	180	250	14.5	4	205	185×185	240	405
112M	190	140	70	ø28	60	8	31	112	ø12	215	180	250	14.5	4	235	200×200	270	455
132S	216	140	89	ø38	80	10	41	132	ø12	265	230	300	14.5	4	261	245×245	310	470
132M	216	178	89	ø38	80	10	41	132	ø12	265	230	300	14.5	4	261	245×245	310	510
160M	254	210	108	ø42	110	12	45	160	ø14.5	300	250	350	18.5	5	320	320X320	450	730
160L	254	254	108	ø42	110	12	45	160	ø14.5	300	250	350	18.5	5	320	320X320	450	770
180M	279	241	121	ø48	110	14	51.5	180	ø14.5	300	250	350	18.5	5	355	360X360	500	790
180L	279	279	121	ø48	110	14	51.5	180	ø14.4	300	250	350	18.5	5	355	360X360	500	930

**TUNYO**



## 東洋變頻電機

TUNYO YF FREQUENCY CONVERSION MOTOR

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PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

DESIGN PHILOSOPHY: To follow the law, but always beyond.

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

R 系列 YF 變 頻 電 機  
R Series YF variable Frequency Motor



型號說明 General Information

<b>YF</b>	-	<b>71</b>	<b>2</b>	-	<b>4</b>	-	<b>750</b>	-	<b>B14</b>	-	<b>GW</b>
電機種類		機座號						安裝方式			
YF:變頻電機 YFM:變頻剎車電機		56 100L 63 112M 71 132S 80 160M 90S 160L 90L 180M						B3:臥式安裝 B14:立式小法蘭安裝 B34:臥式小法蘭安裝 B5:立式大法蘭安裝 B35:臥式大法蘭安裝			
		鐵芯代號						其他			
		1 2 3 4						GW:高溫 FS:防水			
		極數									
		2 4 6									
		功率									
		90W 22000W									



**R 系列 YF 變頻電機**  
R Series YF variable Frequency Motor

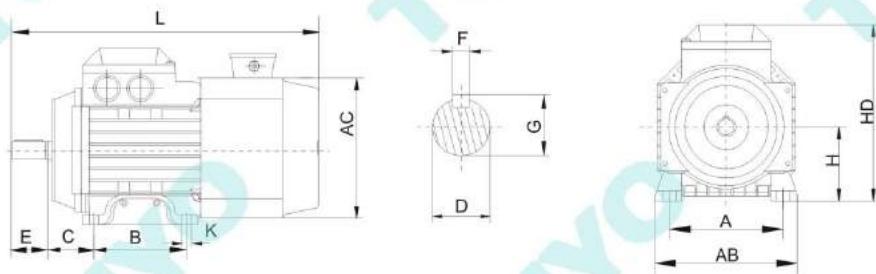
**YF系列技術參數 YF series of technical parameters**

1000r/min 380V 50Hz										變頻風機 Variable Frequency CONVENTION BLOWER		
型号 TYPE	额定 功率 RATED OUTPUT	额定 转速 RATED SPEED	效率 EFFICIENCY	功率 因数 POWER FOCTOR	额定 电流 RATED CURRENT	额定 转矩 RATED TORQUE	堵转转矩 LOCKED ROTOR TORQUE	最大转矩 MAXIMUM TORQUE	电压VOLTAGE			
	KW	rpm		COS φ	A	Nm	Ts/Tn	Tmax/Tn	三相 THREE PHASE	单相 SINGLE PHASE	转速 SPEED rpm	
YF-711-6	0.18	900	58.0	0.66	0.71	1.91	1.9	2.0	380	220	2800	
YF-712-6	0.25	900	59.0	0.68	0.95	2.65	1.9	2.0	380	220	2800	
YF-801-6	0.37	910	62.0	0.70	1.30	3.88	1.9	2.0	380	220	2800	
YF-802-6	0.55	910	65.0	0.72	1.79	5.77	1.9	2.1	380	220	2800	
YF-90S-6	0.75	930	70.0	0.72	2.26	7.7	2.1	2.1	380	220	2800	
YF-90L-6	1.1	940	73.0	0.73	3.14	11.2	2.1	2.1	380	220	2800	
YF-100L-6	1.5	940	76.0	0.76	3.95	15.2	2.2	2.1	380	220	2800	
YF-112M-6	2.2	960	79.0	0.76	5.57	21.9	2.2	2.1	380	220	2800	
YF-132S-6	3	960	81.0	0.76	7.40	29.8	2.2	2.1	380	220	2800	
YF-132M1-6	4	960	83.0	0.76	9.63	39.8	2.2	2.1	380	220	2800	
YF-132M2-6	5.5	960	84.0	0.77	12.9	54.7	2.2	2.1	380	220	2800	
YF-160M-6	7.5	970	86.0	0.78	17.0	73.8	1.8	2.1	380	220	2800	
YF-160L-6	11	970	87.0	0.79	24.3	108.3	1.9	2.1	380	220	2800	
YF-180L-6	15	970	89.0	0.81	31.6	147.7	2.1	2.1	380	220	2800	

**R 系列 YF 變頻電機**  
R Series YF variable Frequency Motor

**YF系列安裝尺寸 YF series installation size**

◆B3(63~180L)

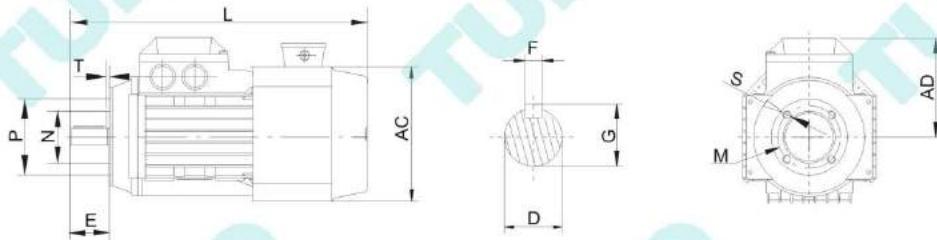


机座号 FRAME SIZE	外型及安装尺寸 INSTALLATION DIMENSIONS												
	A	B	C	D	E	F	G	H	K	AB	AC	HD	L
63	100	80	40	ø11	23	4	12.5	63	ø7	135	120×120	167	260
71	112	90	45	ø14	30	5	16	71	ø7	137	130×130	178	295
80	125	100	50	ø19	40	6	21.5	80	ø10	155	145×145	190	340
90S	140	100	56	ø24	50	8	27	90	ø10	175	160×160	205	390
90L	140	125	56	ø24	50	8	27	90	ø10	175	160×160	205	400
100L	160	140	63	ø28	60	8	31	100	ø12	200	185×185	240	430
112M	190	140	70	ø28	60	8	31	112	ø12	230	200×200	270	460
132S	216	140	89	ø38	80	10	41	132	ø12	270	245×245	315	525
132M	216	178	89	ø38	80	10	41	132	ø12	270	245×245	315	525
160M	254	210	108	ø42	110	12	45	160	ø14.5	320	335×335	450	850
160L	254	254	108	ø42	110	12	45	160	ø14.5	320	335×335	450	870
180M	279	241	121	ø48	110	14	51.5	180	ø14.5	355	370×370	500	880
180L	279	279	121	ø48	110	14	51.5	180	ø14.5	355	370×370	500	980

**R 系列 YF 變頻電機**  
R Series YF variable Frequency Motor

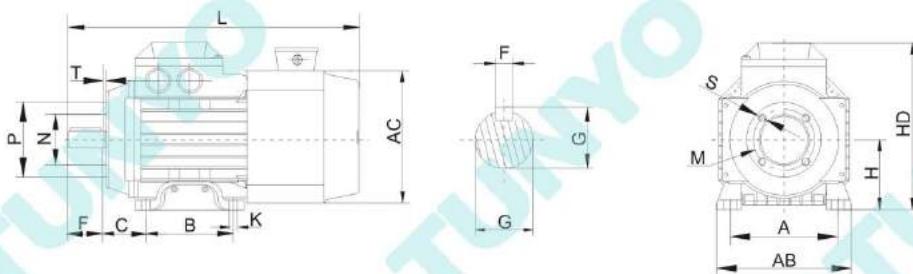
**YF系列安裝尺寸 YF series installation size**

◆ B14(63~112M)



机座号 FRAME SIZE	外型及安装尺寸 INSTALLATION DIMENSIONS												
	D	E	F	G	M	N	P	S	T	AC	AD	L	
63	ø 11	23	4	12.5	75	60	90	M5	2.5	120×120	104	260	
71	ø 14	30	5	16	85	70	105	M6	2.5	130×130	107	295	
80	ø 19	40	6	21.5	100	80	110	M6	3.0	145×145	115	340	
90S	ø 24	50	8	27	115	95	120	M8	3.0	160×160	122	390	
90L	ø 24	50	8	27	115	95	120	M8	3.0	160×160	122	400	
100L	ø 28	60	8	31	130	110	155	M8	3.5	185×185	137	430	
112M	ø 28	60	8	31	130	110	160	M8	3.5	200×200	155	460	

◆ B34(63~112M)

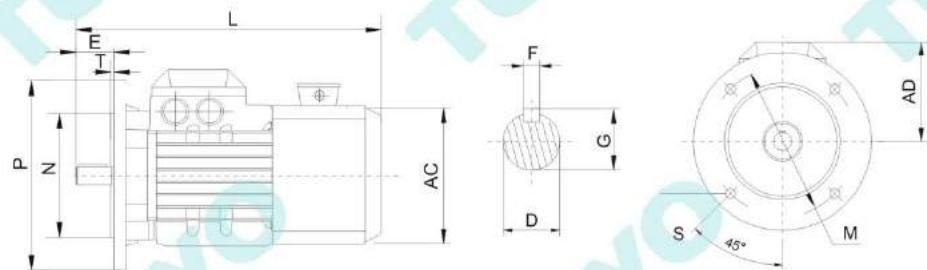


机座号 FRAME SIZE	外型及安装尺寸 INSTALLATION DIMENSIONS																	
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	HD	L
63	100	80	40	ø 11	23	4	12.5	63	ø 7	75	60	90	M5	2.5	135	120×120	167	260
71	112	90	45	ø 14	30	5	16	71	ø 7	85	70	105	M6	2.5	137	130×130	178	295
80	125	100	50	ø 19	40	6	21.5	80	ø 10	100	80	110	M6	3.0	155	145×145	190	340
90S	140	100	56	ø 24	50	8	27	90	ø 10	115	95	120	M8	3.0	175	160×160	205	390
90L	140	125	56	ø 24	50	8	27	90	ø 10	115	95	120	M8	3.0	175	160×160	205	400
100L	160	140	63	ø 28	60	8	31	100	ø 12	130	110	155	M8	3.5	200	185×185	240	430
112M	190	140	70	ø 28	60	8	31	112	ø 12	130	110	160	M8	3.5	230	200×200	270	460

**R 系列 YF 變頻電機**  
R Series YF variable Frequency Motor

**YF系列安裝尺寸 YF series installation size**

◆B5(63~180L)

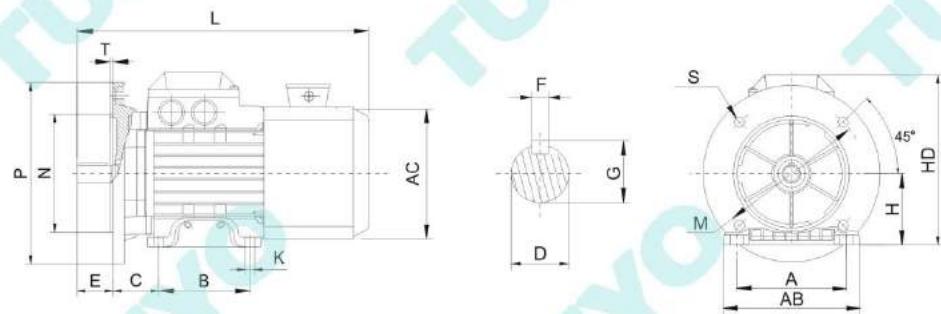


机座号 FRAME SIZE	外型及安装尺寸 INSTALLATION DIMENSIONS											
	D	E	F	G	M	N	P	S	T	AC	AD	L
63	ø 11	23	4	12.5	115	95	140	10	3.0	120×120	104	260
71	ø 14	30	5	16	130	110	160	10	3.5	130×130	107	295
80M	ø 19	40	6	21.5	165	130	200	12	3.5	145×145	115	340
90S	ø 24	50	8	27	165	130	200	12	3.5	160×160	122	390
90L	ø 24	50	8	27	165	130	200	12	3.5	160×160	122	400
100L	28	60	8	31	215	180	250	14.5	4	185×185	137	430
112M	28	60	8	31	215	180	250	14.5	4	200×200	155	460
132S	38	80	10	41	265	230	300	14.5	4	245×245	180	525
132M	38	80	10	41	265	230	300	14.5	4	245×245	180	525
160M	42	110	12	45	300	250	350	18.5	5	335×335	290	850
160L	42	110	12	45	300	250	350	18.5	5	335×335	290	870
180M	48	110	14	51.5	300	250	350	18.5	5	370×370	340	880
180L	48	110	14	51.5	300	250	350	18.4	5	370×370	340	980

**R 系列 YF 變頻電機**  
R Series YF variable Frequency Motor

**YF系列安裝尺寸 YF series installation size**

◆ B35(63~180L)



机座号 FRAME SIZE	外型及安装尺寸 INSTALLATION DIMENSIONS																	
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	HD	L
63	100	80	40	ø11	23	4	12.5	63	ø7	115	95	140	10	2.5	115	120×120	167	260
71	112	90	45	ø14	30	5	16	71	ø7	130	110	160	10	3.5	136	130×130	178	295
80M	125	100	50	ø19	40	6	21.5	80	ø10	165	130	200	12	3.5	154	145×145	190	340
90S	140	100	56	ø24	50	8	27	90	ø10	165	130	200	12	3.5	180	160×160	205	390
90L	140	125	56	ø24	50	8	27	90	ø10	165	130	200	12	3.5	180	160×160	205	400
100L	160	140	63	ø28	60	8	31	100	ø12	215	180	250	14.5	4	205	185×185	240	430
112M	190	140	70	ø28	60	8	31	112	ø12	215	180	250	14.5	4	235	200×200	270	460
132S	216	140	89	ø38	80	10	41	132	ø12	265	230	300	14.5	4	261	245×245	310	525
132M	216	178	89	ø38	80	10	41	132	ø12	265	230	300	14.5	4	261	245×245	310	525
160M	254	210	108	ø42	110	12	45	160	ø14.5	300	250	350	18.5	5	320	335×335	450	850
160L	254	254	108	ø42	110	12	45	160	ø14.5	300	250	350	18.5	5	320	335×335	450	870
180M	279	241	121	ø48	110	14	51.5	180	ø14.5	300	250	350	18.5	5	355	370×370	500	880
180L	279	279	121	ø48	110	14	51.5	180	ø14.5	300	250	350	18.5	5	355	370×370	500	980

**TUNYO**



東洋剎車電機

TUNYO YSM BRAKE MOTOR

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

DESIGN PHILOSOPHY: To follow the law, but always beyond.

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

R 系列 YSM 刹車電機  
R Series YSM Brake Motor



型號說明 General Information

<b>YSM</b>	-	<b>71</b>	<b>2</b>	-	<b>4</b>	-	<b>750</b>	-	<b>B14</b>	-	<b>GW</b>
電機種類						安裝方式					
YS:通用電機		機座號	56	100L	1	功率	90W	B3:臥式安裝	其他	GW:高溫	
YSM:通用剎車電機			63	112M	2		i	B14:立式小法蘭安裝	FS:防水		
YE:高效電機			71	132S	3		22000W	B34:臥式小法蘭安裝			
YEM:高效剎車電機			80	160M	4			B5:立式大法蘭安裝			
YF:變頻電機			90S	160L				B35:臥式大法蘭安裝			
YFM:變頻剎車電機			90L	180M							

## R 系列 YSM 刹車電機 R Series YSM Brake Motor

YSM系列技術參數 YSM series of technical parameters

3000r/min 380V 50Hz										
型号 Type	额定 功率 RATED OUTPUT	额定 转速 RATED SPEED	效率 EFFICIENCY	功率 因数 POWER FACTOR	额定 电流 RATED CURRENT	额定 转矩 RATED TORQUE	堵转转矩 LOCKED ROTOR TORQUE	最大转矩 MAXIMUM TORQUE	静制动力矩 STATIC BRAKE TORQUE NM 直流 DC	控制制动时间 BRAKE TIME/DC RING IDLE S
									额定转矩 RATED TORQUE	
	KW	rpm	η %	COS φ	A	Nm	Ts/Tn	Tmax/Tn		
YSM-631-2	0.18	2800	65.0	0.80	0.53	0.61	2.2	2.2	3.5	0.10
YSM-632-2	0.25	2800	68.0	0.81	0.69	0.85	2.2	2.2	3.5	0.10
YSM-711-2	0.37	2830	70.0	0.81	0.99	1.25	2.2	2.2	4.0	0.10
YSM-712-2	0.55	2830	73.0	0.82	1.40	1.86	2.2	2.3	4.0	0.10
YSM-801-2	0.75	2840	75.0	0.83	1.83	2.52	2.2	2.3	7.5	0.10
YSM-802-2	1.1	2840	77.0	0.84	2.55	3.70	2.2	2.3	7.5	0.10
YSM-90S-2	1.5	2840	79.0	0.84	3.39	5.04	2.2	2.3	15	0.15
YSM-90L-2	2.2	2840	81.0	0.85	4.80	7.40	2.2	2.3	15	0.15
YSM-100L-2	3	2860	83.0	0.87	6.31	10.0	2.2	2.3	30	0.15
YSM-112M-2	4	2880	85.0	0.88	8.22	13.3	2.2	2.3	40	0.15
YSM-132S1-2	5.5	2910	86.0	0.88	11.2	18.0	2.2	2.3	80	0.15
YSM-132S2-2	7.5	2910	87.0	0.88	15.1	24.6	2.2	2.3	80	0.15
YSM-160M1-2	11	2930	88.0	0.89	21.3	35.9	2.2	2.3	150	0.30
YSM-160M2-2	15	2930	89.0	0.89	28.8	48.9	2.2	2.3	150	0.30
YSM-160L-2	18.5	2935	90.0	0.90	34.7	60.2	2.2	2.3	150	0.30
YSM-180M-2	22	2935	90.0	0.90	41.3	71.6	2.0	2.3	200	0.30

1500r/min 380V 50Hz										
型号 Type	额定 功率 RATED OUTPUT	额定 转速 RATED SPEED	效率 EFFICIENCY	功率 因数 POWER FACTOR	额定 电流 RATED CURRENT	额定 转矩 RATED TORQUE	堵转转矩 LOCKED ROTOR TORQUE	最大转矩 MAXIMUM TORQUE	静制动力矩 STATIC BRAKE TORQUE NM 直流 DC	空载制动时间 BRAKE TIME/DC RING IDLE S
									额定转矩 RATED TORQUE	
	KW	rpm	η %	COS φ	A	Nm	Ts/Tn	Tmax/Tn		
YSM-631-4	0.12	1360	57.0	0.72	0.44	0.84	2.2	2.0	3.5	0.10
YSM-632-4	0.18	1360	60.0	0.73	0.62	1.26	2.2	2.0	3.5	0.10
YSM-711-4	0.25	1375	65.0	0.74	0.79	1.74	2.2	2.0	4.0	0.10
YSM-712-4	0.37	1375	67.0	0.75	1.12	2.57	2.2	2.0	4.0	0.10
YSM-801-4	0.55	1405	71.0	0.75	1.57	3.74	2.2	2.4	7.5	0.10
YSM-802-4	0.75	1405	73.0	0.76	2.02	5.10	2.2	2.4	7.5	0.10
YSM-90S-4	1.1	1445	75.0	0.77	2.82	7.27	2.2	2.3	15	0.15
YSM-90L-4	1.5	1445	78.0	0.79	3.70	9.91	2.2	2.3	15	0.15
YSM-100L1-4	2.2	1440	80.0	0.81	5.16	14.6	2.2	2.3	30	0.15
YSM-100L2-4	3	1440	82.0	0.82	6.78	19.9	2.2	2.3	30	0.15
YSM-112M-4	4	1440	84.0	0.82	8.82	26.5	2.2	2.3	40	0.15
YSM-132S1-4	5.5	1440	85.0	0.83	11.7	36.5	2.2	2.3	80	0.15
YSM-132S2-4	7.5	1440	87.0	0.84	15.6	49.7	2.2	2.3	80	0.15
YSM-160M1-4	11	1450	88.0	0.85	21.3	72.4	2.2	2.2	150	0.30
YSM-160M2-4	15	1450	89.0	0.85	30.1	98.8	2.2	2.2	150	0.30
YSM-180M-4	18.5	1455	90.5	0.86	36.5	121.4	2.2	2.2	150	0.30
YSM-180L-4	22	1455	91.0	0.86	43.1	144.4	2.0	2.2	200	0.30

**R 系列 YSM 刹車電機**  
**R Series YSM Brake Motor**

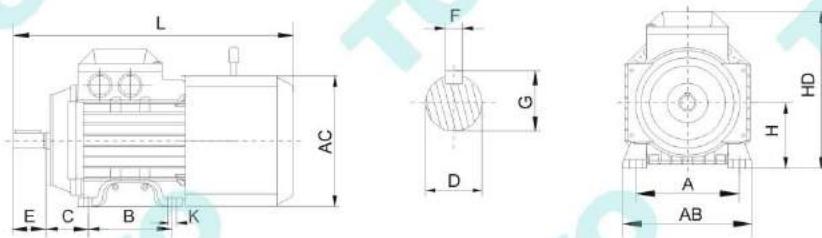
**YSM系列技術參數 YSM series of technical parameters**

型号 Type	1000r/min 380V 50Hz									
	额定功率 RATED OUTPUT	额定转速 RATED SPEED	效率 EFFICIENCY	功率因数 POWER FACTOR	额定电流 RATED CURRENT	额定转矩 RATED TORQUE	堵转转矩 LOCKED ROTOR TORQUE	最大转矩 MAXIMUM TORQUE	静制动力矩 STATIC BRAKE TORQUE NM	空载制动时间 BRAKE TORQUE DURING IDLE s
							额定转矩 RATED TORQUE	额定转矩 RATED TORQUE		
	KW	rpm	η %	COS ϕ	A	Nm	Ts/Tn	Tmax/Tn	DC	s
YSM-711-6	0.18	900	56.0	0.66	0.71	19.1	1.9	2.0	4.0	0.10
YSM-712-6	0.25	900	59.0	0.68	0.95	2.65	1.9	2.0	4.0	0.10
YSM-801-6	0.37	910	62.0	0.70	1.30	3.88	1.9	2.0	7.5	0.10
YSM-802-6	0.55	910	65.0	0.72	1.79	5.77	1.9	2.1	7.5	0.10
YSM-90S-6	0.75	930	69.0	0.72	2.26	7.7	2.1	2.1	15	0.15
YSM-90L-6	1.1	940	72.0	0.73	3.14	11.2	2.1	2.1	15	0.15
YSM-100L-6	1.5	940	76.0	0.76	3.95	15.2	2.2	2.1	30	0.15
YSM-112M-6	2.2	960	79.0	0.76	5.57	21.9	2.2	2.1	40	0.15
YSM-132S-6	3	960	81.0	0.76	7.40	29.8	2.2	2.1	80	0.15
YSM-132M1-6	4	960	82.0	0.76	9.63	39.8	2.2	2.1	80	0.15
YSM-132M2-6	5.5	960	84.0	0.77	12.9	54.7	2.2	2.1	150	0.30
YSM-160M-6	7.5	970	86.0	0.77	17.0	73.8	1.8	2.1	150	0.30
YSM-160L-6	11	970	87.5	0.78	24.3	108.3	1.9	2.1	150	0.30
YSM-180L-6	15	970	89.0	0.81	31.6	147.7	2.1	2.1	200	0.30

**R 系列 YSM 刹車電機**  
**R Series YSM Brake Motor**

**YSM系列安裝尺寸 YSM series installation size**

◆ B3(63~112M)

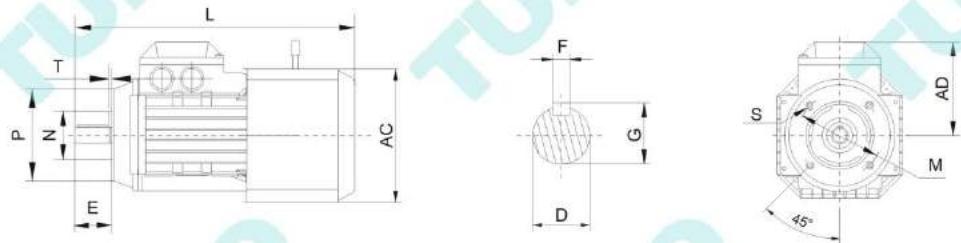


机座号 Frame Size	外型及安装尺寸 Installation Dimensions												
	A	B	C	D	E	F	G	H	K	AB	AC	HD	L
63	100	80	40	ø11	23	4	12.5	63	ø7	135	120X120	167	255
71	112	90	45	ø14	30	5	16	71	ø7	137	130X130	178	305
80M	125	100	50	ø19	40	6	21.5	80	ø10	155	145X145	190	340
90S	140	100	56	ø24	50	8	27	90	ø10	175	160X160	205	400
90L	140	125	56	ø24	50	8	27	90	ø10	175	160X160	205	400
100L	160	140	63	ø28	60	8	31	100	ø12	200	185X185	240	440
112M	190	140	70	ø28	60	8	31	112	ø12	230	200X200	270	480
132S	216	140	89	ø38	80	10	41	132	ø12	270	245X245	315	567
132M	216	178	89	ø38	80	10	41	132	ø12	270	245X245	315	567
160M	254	210	108	ø42	110	12	45	160	ø14.5	320	335X335	450	780
160L	254	254	108	ø42	110	12	45	160	ø14.5	320	335X335	450	780
180M	279	241	121	ø48	110	14	51.5	180	ø14.5	355	370X370	500	880
180L	279	279	121	ø48	110	14	51.5	180	ø14.5	355	370X370	500	880

**R 系列 YSM 刹車電機**  
**R Series YSM Brake Motor**

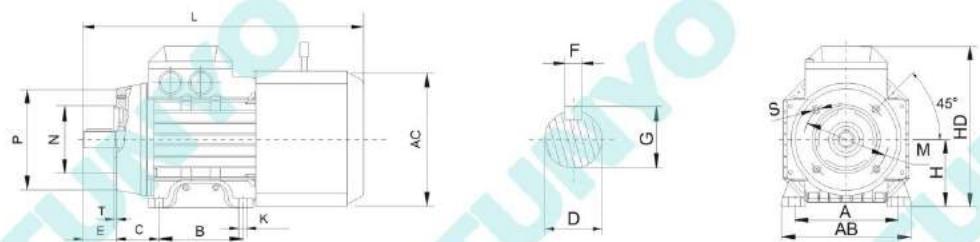
**YSM系列安裝尺寸 YSM series installation size**

◆ B14(63~112M)



机座号 Frame size	外型及安装尺寸 Installation Dimensions											
	D	E	F	G	M	N	P	S	T	AC	AD	L
63	ø11	23	4	12.5	75	60	90	M5	2.5	120×120	104	255
71	ø14	30	5	16	85	70	105	M6	2.5	130×130	107	305
80	ø19	40	6	21.5	100	80	110	M6	3.0	145×145	115	340
90S	ø24	50	8	27	115	95	120	M8	3.0	160×160	122	400
90L	ø24	50	8	27	115	95	120	M8	3.0	160×160	122	400
100L	ø28	60	8	31	130	110	155	M8	3.5	185×185	137	440
112M	ø28	60	8	31	130	110	160	M8	3.5	200×200	155	480

◆ B34(63~112M)

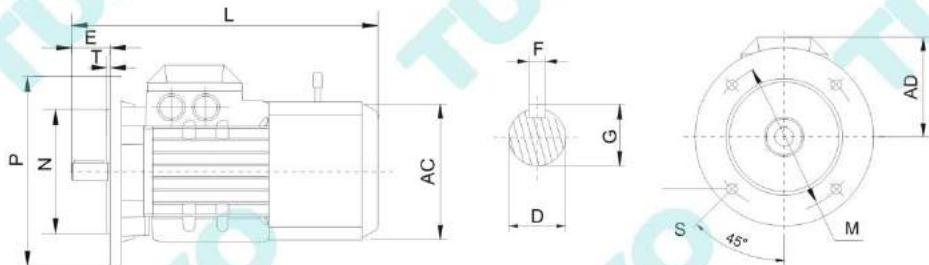


机座号 Frame size	外型及安装尺寸 Installation Dimensions																	
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	HD	L
63	100	80	40	ø11	23	4	12.5	63	ø7	75	60	90	M5	2.5	135	120×120	167	255
71	112	90	45	ø14	30	5	16	71	ø7	85	70	105	M6	2.5	137	130×130	180	305
80	125	100	50	ø19	40	6	21.5	80	ø10	100	80	110	M6	3.0	155	145×145	190	340
90S	140	100	56	ø24	50	8	27	90	ø10	115	95	120	M8	3.0	175	160×160	205	400
90L	140	125	56	ø24	50	8	27	90	ø10	115	95	120	M8	3.0	175	160×160	205	400
100L	160	140	63	ø28	60	8	31	100	ø12	130	110	155	M8	3.5	200	185×185	240	440
112M	190	140	70	ø28	60	8	31	112	ø12	130	110	160	M8	3.5	230	200×200	270	480

**R 系列 YSM 刹車電機**  
**R Series YSM Brake Motor**

**YSM系列安裝尺寸 YSM series installation size**

◆ B5(63~180L)

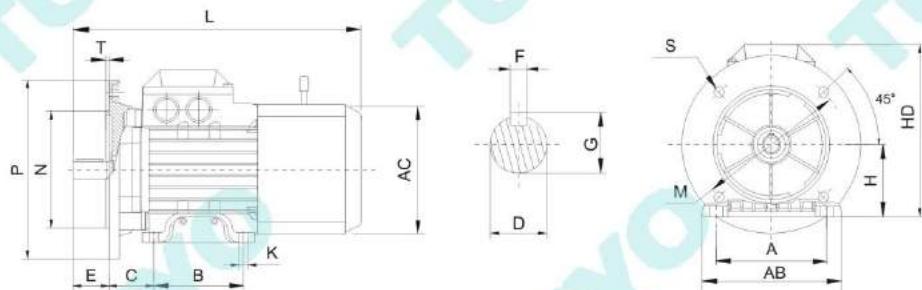


机座号 Frame size	外型及安装尺寸 Installation Dimensions											
	D	E	F	G	M	N	P	S	T	AC	AD	L
63	ø 11	23	4	12.5	115	95	140	10	3.0	120×120	104	255
71	ø 14	30	5	16	130	110	160	10	3.0	130×130	107	305
80M	ø 19	40	6	21.5	165	130	200	12	3.5	145×145	115	340
90S	ø 24	50	8	27	165	130	200	12	3.5	160×160	122	400
90L	ø 24	50	8	27	165	130	200	12	3.5	160×160	122	400
100L	ø 28	60	8	31	215	180	250	14.5	4	185×185	137	440
112M	ø 28	60	8	31	215	180	250	14.5	4	200×200	155	480
132S	ø 38	80	10	41	265	230	300	14.5	4	245×245	180	567
132M	ø 38	80	10	41	265	230	300	14.5	4	245×245	180	567
160M	ø 42	110	12	45	300	250	350	18.5	5	320×320	290	780
160L	ø 42	110	12	45	300	250	350	18.5	5	320×320	290	780
180M	ø 48	110	14	51.5	300	250	350	18.5	5	360×360	340	880
180L	ø 48	110	14	51.5	300	250	350	18.5	5	360×360	340	880

**R 系列 YSM 刹車電機**  
**R Series YSM Brake Motor**

**YSM系列安裝尺寸 YSM series installation size**

◆ B35(63~180L)



机座号 Frame size	外型及安装尺寸 Installation Dimensions																	
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	HD	L
63	100	80	40	ø11	23	4	12.5	63	ø7	115	95	140	10	2.5	115	120×120	167	255
71	112	90	45	ø14	30	5	16	71	ø7	130	110	160	10	3.5	136	130×130	178	305
80M	125	100	50	ø19	40	6	21.5	80	ø10	165	130	200	12	3.5	154	145×145	192	340
90S	140	100	56	ø24	50	8	27	90	ø10	165	130	200	12	3.5	180	160×160	205	400
90L	140	125	56	ø24	50	8	27	90	ø10	165	130	200	12	3.5	180	160×160	205	400
100L	160	140	63	ø28	60	8	31	100	ø12	215	180	250	14.5	4	205	185×185	240	440
112M	190	140	70	ø28	60	8	31	112	ø12	215	180	250	14.5	4	235	200×200	270	480
132S	216	140	89	ø38	80	10	41	132	ø12	265	230	300	14.5	4	261	245×245	310	567
132M	216	178	89	ø38	80	10	41	132	ø12	265	230	300	14.5	4	261	245×245	310	567
160W	254	210	108	ø42	110	12	45	160	ø14.5	300	250	350	18.5	5	320	335×335	450	780
160L	254	254	108	ø42	110	12	45	160	ø14.5	300	250	350	18.5	5	320	335×335	450	780
180W	279	241	121	ø48	110	14	51.5	180	ø14.5	300	250	350	18.5	5	355	370×370	500	880
180L	279	279	121	ø48	110	14	51.5	180	ø14.5	300	250	350	18.5	5	355	370×370	500	880

**TUNYO**



## 東洋蝸輪蝸杆減速機

TUNYO NMRV WORM GEAR BOX

PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

DESIGN PHILOSOPHY: To follow the law, but always beyond.

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

**TUNYO INTELLIGENT DEVICE CO.,LTD**

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R系列 蝶輪減速機  
R Series RV Gear Motor



型號說明 General Information

NMRV

減速機系列代號  
NMRV:法蘭輸入  
NRV:軸輸入

063

機座號  
025 075  
030 090  
040 110  
050 130  
063 150

50

減速比  
1:5~100

80M

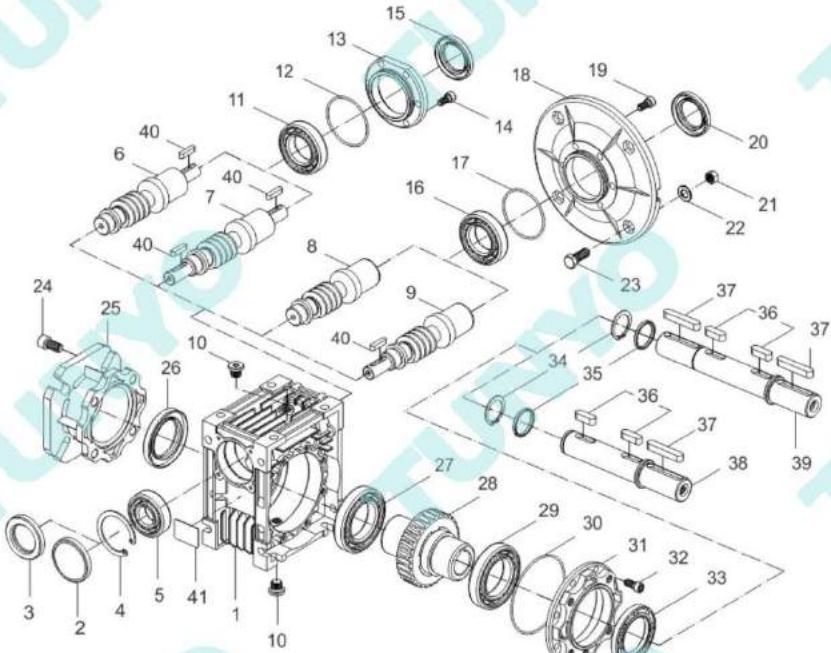
輸入法蘭代號

SS

其他  
SS:單軸輸出  
DS:雙軸輸出  
TA:扭力臂  
C:防塵蓋  
FA/FB/FC/FD:  
輸出法蘭  
E:蝸杆尾出軸

**R系列 蝶輪減速機**  
R Series RV Gear Motor

結構分解圖 Structure diagram



1	箱体 / Cabinet	22	垫圈 / Washer
2	油封蓋 / Closing cap	23	外六角螺栓 / Six hexagon bolt
3	油封 / Oil seal	24	内六角螺钉 / Inner hex screw
4	孔用挡圈 / Hole-circlip	25	输出法兰 / Output flange
5	轴承 / Bearing	26	油封 / Oil seal
6	轴输入蜗杆 / Input shaft worm	27	轴承 / Bearing
7	双轴输入蜗杆 / Double input worm	28	蜗轮 / Worm gear
8	孔输入蜗杆 / Input hole worm	29	轴承 / Bearing
9	孔输入轴输入蜗杆 / Input shaft and hole worm	30	O型橡胶密封圈 / O-ring
10	油塞 / Oil plug	31	输出端盖 / Bearing support cover
11	轴承 / Bearing	32	内六角螺钉 / Inner hex screw
12	O型橡胶密封圈 / O-ring	33	油封 / Oil seal
13	轴承座 / Bearing block	34	轴用挡圈 / Shaft-circlip
14	内六角螺钉 / Inner hex screw	35	垫圈 / Washer
15	油封 / Oil seal	36	键 / Key
16	轴承 / Bearing	37	键 / Key
17	O型橡胶密封圈 / O-ring	38	单向输出轴 / Single output shaft
18	输入法兰 / Input flange	39	双向输出轴 / Double output shaft
19	内六角螺钉 / Inner hex screw	40	键 / Key
20	油封 / Oil seal	41	铭牌 / Nameplate
21	外六角螺母 / Six hexagon nut		

產品概述 Summarize

◆ 结构特点 / Structure Features

1. 优质铝合金铸造箱体，适应全方位的万能安装配置；
  2. 充分的冷却筋条，使机体具有优良的热传导性能；
  3. 从025-150共10种机座规格；传递功率范围从60W-15kW；
  4. 速比范围大，每单个机座具有从5: 1到100: 1的12种减速比；
  5. 精密磨削加工的硬齿面传动蜗杆，效率高、输出扭矩大；
  6. 低噪声平稳运转，能适合在恶劣环境中长期连续工作；
  7. 重量轻，机械强度高；
  8. 模块化组合DRV将NMRV减速机的传动比拓展至：i=5-5000
- 
1. high quality die casting aluminum alloy housing ,suitable for universal mounting .
  2. Heat sink design for cooling provides great surface area and higher thermal capacity than the casting iron housings
  3. 025 to 150,with power scope from 60W to 15kW.
  4. Larger speed ratio range .each single frame size has 12 ratios from 5:1 to 100:1
  5. Hardened worm with fine grinding has the features of higher efficiency and big output torque .
  6. Low noise and stably running ,can adapt long term work condition in terrible environments
  7. Light weight ,high mechanical strength .
  8. Modularization combination DRV extend the ration of NMRV reducers from i=5:1 to 5000:1.

◆ 主要材料 / Main Materials

1. 外壳：铝合金（机座：025-090），铸铁（机座：110-150）；
  2. 蜗杆：20Cr，渗碳淬火，齿面硬度58-62HRC，精磨后保持渗碳层厚度0.3-0.5mm；
  3. 蜗轮：耐磨镍青铜。
- 
1. Housing: die-cast aluminum alloy(frame size 025 to 090);cast iron(frame size:110 to 150);
  2. Worm: 20Cr, carbonize&quencher heat treatment make the hardness of gear's surface up to 58-62HRC, retain carburized layer's thickness between 0.3 and 0.5mm after accurate grinding.
  3. Worm wheel:wearable nickel bronze alloy.

◆ 表面涂装 / Surface Painting

铝合金外壳：

- 1.先抛丸处理，再经特种防腐处理，保持银白金属感，并耐汽油、二甲苯等有机溶剂的腐蚀；
- 2.磷化处理后，再喷RAL5010蓝色或RAL7035浅灰色涂料。

铸铁外壳：先涂红色防锈漆，后喷涂RAL5010蓝色或RAL7035浅灰色涂料。

Aluminum alloy housing:

1. Shot blasting and special antiseptic treatment on the aluminum alloy surface.
2. After phosphating, paint with RAL5010 blue or RAL7035 grey paint.

Cast iron housing: First paint with red antirust paint, then paint white RAL5010 blue or RAL7035

## R系列蜗輪減速機 R Series RV Gear Motor

### 選型相關參數 Relevant parameter

#### ◆ 功率 P

$$P_1 = P_2 / \eta \text{ (kW)}$$
$$P_{1n} \geq P_1 \cdot fs \text{ (kW)}$$

P<sub>1</sub> 输入功率  
P<sub>1n</sub> 输入电机额定功率  
 $\eta$  传动效率

P<sub>2</sub> 输出功率  
fs 服务系数

在NMRV蜗轮蜗杆减速机选型表中，这个功率P<sub>1n</sub>是指在输入转速为n<sub>1</sub>并且对应的服务系数fs=1时，减速机的安全输入功率，单位kW。

传动效率  $\eta$  值是减速机经过足够长时间的跑合后计算得到的。跑合后在动转过程中，表面温度下降并最终稳定。需要特别强调的是样本中给定的额定转矩值M<sub>2n</sub>应该考虑到传动效率  $\eta$  的关系。

#### ◆ Power p

$$P_1 = P_2 / \eta \text{ (kW)}$$
$$P_{1n} \geq P_1 \cdot fs \text{ (kW)}$$

P<sub>1</sub> Input power  
P<sub>1n</sub> Rated input motor power  
 $\eta$  Transmission efficiency

P<sub>2</sub> Output power  
fs Service factor

The parameter can be found in the NMRV gear-box rating charts and represents the kW that can be safely transmitted to the gearbox, based on input speed n<sub>1</sub> and service factor fs=1.

Values of  $\eta$  are calculated for gearboxes after a sufficiently long operation reduces and finally stabilizes. It may be worth highlighting that values of rated torque M<sub>2n</sub> given in the catalogue take the transmission efficiency  $\eta$  into consideration.

### 轉速n Rotation speed n

n<sub>1</sub> 减速机输入转速

n<sub>2</sub> 减速机输出转速

若是减速箱外部传动装置驱动，为了优化工作条件和提高使用寿命，建议使用1400r/min或更低转速。

n<sub>1</sub> Gear units input speed

n<sub>2</sub> Gear units output speed

If driven by the external gearing, 1400r/min or lower rotation speed is suggested so as to optimize the working conditions and prolong the service life.

$$i = n_1 / n_2$$

### 傳動比i Transmission ration i

$$M_2 = 9550 \cdot P_1 \cdot \eta / n_2 \text{ (Nm)}$$
$$M_{2n} \geq M_2 \cdot fs \text{ (Nm)}$$

M<sub>2</sub> 输出扭矩

M<sub>2n</sub> 额定输出扭矩

P<sub>1</sub> 输入功率

$\eta$  传动效率

fs 服务系数

$$M_2 = 9550 \cdot P_1 \cdot \eta / n_2 \text{ (Nm)}$$
$$M_{2n} \geq M_2 \cdot fs \text{ (Nm)}$$

M<sub>2</sub> Output torque

M<sub>2n</sub> Rated output torque

P<sub>1</sub> Input power

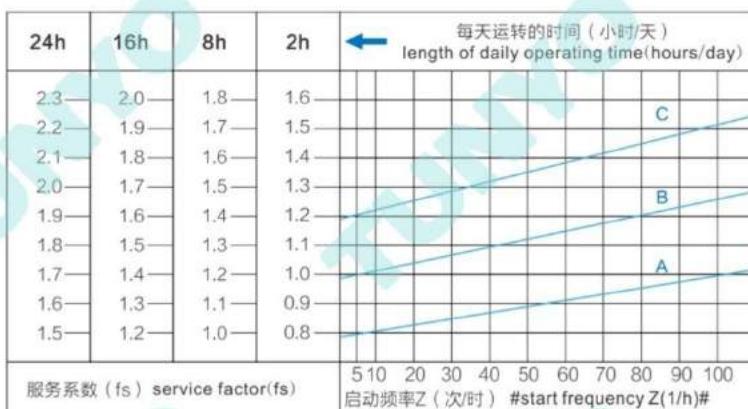
$\eta$  Transmission efficiency

fs Service factor

選型相關參數 Relevant parameter

◆ 服务系数 Service factor fs

减速机上的从动机构的受驱动效果是用服务系数fs这个系数来衡量的。该服务系数根据每天的运转时间和启动频率Z而定的。三种负载分类取决于惯性加速系数，在下图中可读取实际应用的服务系数，按这图表选取的服务系数必须小于或者等于性能参数表中提供的服务系数。



- ◆ 启动频率Z：周期包括所有启动，制作的次数以及变速电机高低速变化时的次数。
- ◆ Starting frequency Z: The cycles include all starting and braking procedures as well as change overs from low to high speed.

負載類型 Load classifications

负载性质：

- 均匀冲击负载，允许惯性加速系数  $F_a \leq 0.3$
- 中等冲击负载，允许惯性加速系数  $F_a \leq 3$
- 重冲击负载，允许惯性加速系数  $F_a \leq 10$

Type of load:

- Uniform ,permitted mass acceleration factor  $F_a \leq 0.3$
- Moderate shock load,permitted mass acceleration factor  $F_a \leq 3$
- Heavy shock load,permitted mass acceleration factor  $F_a \leq 10$

### 選型相關參數 Relevant parameter

#### ◆ 負載類型：

輕負載的螺杆輸送，風扇，裝備線，輸送帶，小型攪拌器，電梯，清潔機器，過濾器，控制驅動。  
卷揚機，木工機器進料器，貨物起重機，平衡器，絞螺旋機器，中型攪拌器，重型輸送帶，絞盤，滑動閘門，挂料機，包裝機械，混凝土攪拌機，行車駕駛裝置，鏽床，齒輪泵。  
大型攪拌器，剪床，壓機，離心機，旋轉支撐裝置，重型絞盤和起重機，磨床，石材打磨機，翻斗機，鑽床，沖床，凸軸壓機，摺床，機床轉盤，翻桶裝置，振蕩裝置，破碎機。

#### Load Classifications:

Screw feeders for light materials,fans,assembly lines,conveyor belts for light materials,small mixers,lifts,cleaning machines,medium mixers,conveyor belts for heavy materials,winches,sliding doors,fertilizer scrapers,packing machines,concrete mixers,crane mechanisms,milling cutters,folding machines,gear pumps.  
Mixers for heavy materials,shears,presses centrifuges,rotating supports,winches and lifts for heavy materials,grinding lathes,stone mills,bucket elevators,drilling machines,hammer mills,campresses,folding machines,turtables,tumbling barrels,vibrators,shredders.

### 慣性加速系數 Mass acceleration factor

慣性加速系數計算如下：

$$Fa = Jc/Jm$$

Fa慣性加速系數

Jc所有外部傳動慣量 (kgm<sup>2</sup>)

Jm驅動電機的傳動慣量 (kgm<sup>2</sup>)

如果慣性加速系數Fa>10，請與我們技術部聯繫。

受環境溫度影響，服務系數fs仍須按以下調整：

- 1.環境溫度30~40°C: fs × (1.1~1.2)
- 2.環境溫度40~50°C: fs × (1.3~1.4)
- 3.環境溫度50~60°C: fs × (1.5~1.6)
- 4.環境溫度>60°C, 請與我們技術服務人員聯繫。

為了保持減速機的使用寿命，從產品樣本中所選擇的服務系數fs應等於或略高於計算出的服務系數fs。

The mass acceleration factor is calculated as follows:

$$Fa = Jc/Jm$$

Fa Mass acceleration factor

Jc All external mass moments of inertia(kgm<sup>2</sup>)

Jm Mass moment of inertia on the motor end(kgm<sup>2</sup>)

If mass acceleration factors fa>10,please call our Technical Service.

Service factor fs should be adjusted as followings:

- 1.ambient temperature is 30~40°C : fs × ( 1.1 ~ 1.2 )
- 2.ambient temperature is 40~50°C : fs × ( 1.3 ~ 1.4 )
- 3.ambient temperature is 50~60°C : fs × ( 1.5 ~ 1.6 )
- 4.ambient temperature is >60°C,please call our Technical Service.

To keep the service-life of gear units,use factor fs selected from the catalogue must be equal or slightly higher than the calculated use factor fs.

### 徑向載荷Fr Radial loads Fr

在決定影響徑向載荷時，安裝在軸端上的傳動件類型必須考慮在內，不同類型的傳動對應不同的傳動附加系數fz，列表如下：

When determining the resulting radial loads,the type of transmission elements,mounted on the shaft end must be considered,Various transmission elements are corresponding with following transmission element factors fz.

選型相關參數 Relevant parameter

传动件 Transmission element	传动附加系数fz Transmission element factor fz	注释 Comments
齿轮 Gears	1.00	≥17齿 teeth
	1.15	<17齿 teeth
链轮 Chain sprockets	1.00	≥20齿 teeth
	1.25	<20齿 teeth
	1.40	<13齿 teeth
V带轮 Narrow V-belt pulleys	1.75	有预紧力作用 Influence of the tensile force
平带轮 Flat belt pulleys	2.50	有预紧力作用 Influence of the tensile force
齿带轮 Toothed belt pulleys	2.50	有预紧力作用 Influence of the tensile force

作用在轴上的径向载荷按如下公式计算：

$$Fr = \frac{M \cdot 2000 \cdot fz}{d_0} \text{ (N)}$$

Fr 作用在轴上的载荷 ( N )

M 作用在轴上的扭矩 ( Nm )

d<sub>0</sub> 安装在轴上传动件的平均直径 ( mm )

fz 传动附加系数

The overhung loads exerted on the motor or gear shaft is then calculated as follows.

$$Fr = \frac{M \cdot 2000 \cdot fz}{d_0} \text{ (N)}$$

Fr Resulting radial load ( N )

M Torque on the shaft ( Nm )

d<sub>0</sub> Mean diameter of the mounted transmission element in (mm)

fz Transmission element factor

当径向负荷不作用在轴中点时，按以下公式计算有效负荷：

$$FxL = \frac{Fr_2 \cdot a}{(b+x)} \text{ (N)}$$

F<sub>r2</sub> 依据下面表格给出中底脚安装式齿轮减速机的许可径向载荷 ( X=L/2 ) ( N )

a,b 减速机径向换算常量 ( mm )

x 轴肩到实际作用点的距离 ( mm )

a,b,F<sub>r2</sub> 的数值在下面表格给出：

The allowed radial load force on the shaft is calculated with the following formula:

$$FxL = \frac{Fr_2 \cdot a}{(b+x)} \text{ (N)}$$

F<sub>r2</sub> Permitted overhung load(X=L/2) for foot-mounted gear units according to the selection tables in(N)

a,b Gear unit constant for overhung load conversion(mm)

x Distance from the shaft shoulder to the force application point in(mm)

The values of a,b,F<sub>r2</sub> are given in the following tables:

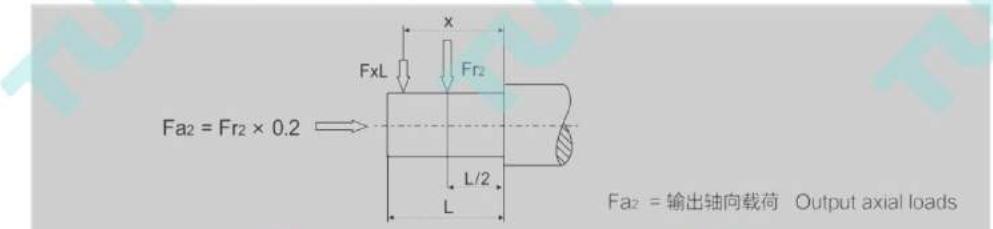
当径向和轴向负载同时存在时，最大的允许轴向负载值只是径向负载值的1/5，图表中所表示的是输出轴的最大重量。

The maximum admissible axial loads are 1/5 of the value of the given radial load when they are applied in combination with the radial load. The tables relating to the output shafts give the maximum admissible value.

## R系列 蝶輪減速機 R Series RV Gear Motor

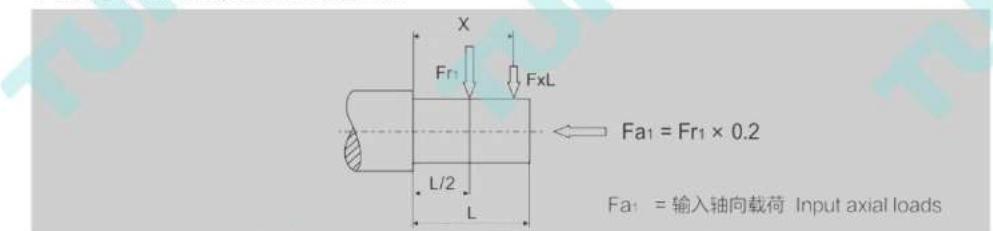
### 選型相關參數 Relevant parameter

#### ◆ 输出軸徑向載荷 / Output shafts radial loads



NMRV	025	030	040	050	063	075	090	110	130	150
a	50	65	84	101	120	131	162	176	188	215
b	38	50	64	76	95	101	122	136	148	174
$F_{r1\max}$	1350	1830	3490	4840	6270	7380	8180	12000	13500	18000

#### ◆ 输入軸徑向載荷 / Input shafts radial loads



NRV	030	040	050	063	075	090	110	130	150
a	86	106	129	159	192	227	266	314	350
b	76	94.5	114	139	167	202	236	274	310
$F_{r1\max}$	210	350	490	700	980	1270	1700	2100	2800

### 選型表注釋 Selection tables comments

$P_{in}$	输入电机额定功率 ( kW )	$P_{in}$	Rated power driving motor ( kW )
$n_2$	输出转速 ( r/min )	$n_2$	Output speed ( r/min )
$M_{2n}$	额定输出扭矩 ( Nm )	$M_{2n}$	Rated output torque ( Nm )
$M_{2\max}$	最大允许输出扭矩 ( Nm )	$M_{2\max}$	Permissible output torque ( Nm )
i	减速机速比	i	Gear unit ratio
fs	服务系数	fs	Service factor
	RV减速机型号		RV Gear unit type
	DRV减速机型号		DRV gear unit type
	电机型号		Motor type

選型相關參數 Relevant parameter

選型舉例分析 / Selection example

減速電機

例：被驅動設備所需功率0.5kW,  $n_1=1400\text{r/min}$ , 均勻衝擊負載，啟動頻率20次/小時，24小時連續運行，環境溫度32°C，輸出轉速 $n_2=93.3\text{r/min}$ ，減速電機要求B3安裝方位，則：

$$i = \frac{n_1}{n_2} = \frac{1400}{93.3} = 15$$

查啮合參數表，估計當*i*=15時， $\eta_d=0.82$ 查看調整服務系數得 $fs=1.53 \times 1.12=1.714$ ,  $P_m \geq P_d/\eta_d \cdot fs=0.5/0.82 \times 1.714=1.045(\text{kW})$ ，查NMRV系列性能參數表可確定減速電機型號為：

**NMRV075/15/B3/1.1-4P**，輸出扭矩 $M_2$ 計算：

$$M_2 = \frac{9550 \cdot P_2}{n_2} = \frac{9550 \times 0.5}{93.3} = 51.18 (\text{Nm})$$

$$M_{2n} = 95 \geq M_2 \cdot fs = 51.18 \times 1.714 = 87.72 (\text{Nm})$$

減速機

例：被驅動設備所需扭矩為300Nm，工作8小時連續運行，均勻衝擊負載，啟動頻率5次/小時，環境溫度30°C，即可選用系數 $fs=1.2 \times 1.1=1.32$ ，減速機輸入轉速 $n_1=900\text{r/min}$ ，輸出轉速 $n_2=22.5\text{r/min}$ 。

$$M_{2n} \geq M_2 \cdot fs = 300 \times 1.32 = 396 (\text{Nm})$$

$$i = \frac{n_1}{n_2} = \frac{900}{22.5} = 40$$

查NMRV系列性能參數表可確定減速機型號為：

**NMRV090/40**

效率與自鎖特性 / Efficiency & irreversibility character

效率是減速機一個重要參數，效率  $\eta$  的值取決於下列參數：1. 蜈輪蜗杆的螺旋角；2. 輸入轉速；3. 蜈輪蜗杆的磨合時間；4. 油品、油封和軸承的性能。在上的啮合參數表列出了動態效率 ( $n_1=1400$ ) 及靜態效率參數。請注意：這些參數是指減速機磨合後性能穩定的計算值。另外，樣本中規定的扭矩 $M_{2n}$ 也是減速機磨合後性能穩定的計算值。上述的實際值可能會有上下偏差。

Efficiency is an important parameter of reducer, efficiency  $\eta$  depends on the following parameters: 1. helix angle of gearing; 2. driving speed; 3. running-in of gearing; 4. The performance of oil, oil seal and bearing, the mesh date table shows dynamic efficiency ( $n_1=1400$ ) and static efficiency values. Remember that these values are only achieved after the unit has been run in. Torque values  $M_{2n}$  indicated in the catalogue are calculated by considering the steady-state performance of the gearboxes. The actual values mentioned above may have deflection.

GEAR MOTOR

Example: The input power of driver machine is 0.5kW,  $n_1=1400\text{r/min}$ , uniform start up frequency 20(1/h), continuous running for 24hours, the ambient temperature is 32°C,  $n_2=93.3\text{r/min}$ , B3 mounted so:

$$i = \frac{n_1}{n_2} = \frac{1400}{93.3} = 15$$

Check mesh table, estimate when the  $i=15, \eta_d=0.82$ .

Check and adjust the service factor, will get  $fs=1.53 \times 1.12=1.714$ ,  $P_m \geq P_d/\eta_d \cdot fs=0.5/0.82 \times 1.714=1.045(\text{kW})$ .

Choose type: **NMRV075/15/B3/1.1-4P**

$$M_2 = \frac{9550 \cdot P_2}{n_2} = \frac{9550 \times 0.5}{93.3} = 51.18 (\text{Nm})$$

$$M_{2n} = 95 \geq M_2 \cdot fs = 51.18 \times 1.714 = 87.72 (\text{Nm})$$

GEAR UNITS

Example: Required torque 300Nm on driven machine, continuous running for 8 hours, uniform load, the ambient temperature is 30°C, then choose service factor  $fs=1.2 \times 1.1=1.32$ ,  $n_1=900\text{r/min}$ ,  $n_2=22.5\text{r/min}$ .

$$M_{2n} \geq M_2 \cdot fs = 300 \times 1.32 = 396 (\text{Nm})$$

$$i = \frac{n_1}{n_2} = \frac{900}{22.5} = 40$$

Choose type: **NMRV090/40**

**選型相關參數 Relevant parameter**

**动态自锁 / Dynamic irreversibility**

动态自锁是指当马达输入突然停止时，输出轴能同步停止。此条件要求动态效率  $\eta_d < 0.4$

Dynamic irreversibility achieved when the output shaft stops instantly when drive is no longer transmitted through the worm shaft. This condition requires a dynamic efficiency of  $\eta_d < 0.4$ .

**静态自锁 / Static irreversibility**

静态自锁是指当减速机处于静止状态时，输出轴上的负载不能把蜗轮推动。

此条件要求静态效率  $\eta_s < 0.5$

Static irreversibility is achieved when the gear reducer at a standstill. The application of a load to the output shaft can't drive the worm shaft. This condition requires a static efficiency of  $\eta_s < 0.5$ .

$\eta_d$	>0.6	0.5 ~ 0.6	0.4 ~ 0.5	<0.4
动态自锁效果	动态不自锁	动态自锁很低	动态自锁良好	动态自锁
Dynamic irreversibility	Dynamic reversibility	Low dynamic reversibility	Good dynamic irreversibility	Dynamic irreversibility

$\eta_s$	>0.55	0.5 ~ 0.55	<0.5
静态自锁效果	静态不自锁	静态自锁很低	静态自锁
Dynamic irreversibility	Static reversibility	Low static reversibility	Static irreversibility

上述表格中所有参数只是供大概参考，振动和冲击也会影响减速机的自锁功能。事实上要保证完全自锁是不可能的，我们建议需要时安装外部的安全制动的装置。对于一个组合减速机自锁条件时，必须考虑单减速机的自锁功能效率，因为整体自锁功能是： $\eta_{tot} = \eta_1 \times \eta_2$

The table shows approximate irreversibility classes. Vibrations and shocks can affect a gear reducer's irreversibility. As it is virtually impossible to provide and guarantee total non reversing, we recommend the use of an external brake with sufficient capability to prevent vibrations in duced starting, where these circumstances are required. For the irreversibility conditions of a combined geared unit one must consider that the efficiency of the group is given by the product of the efficiencies of each single reducer:  $\eta_{tot} = \eta_1 \times \eta_2$ .



**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

NMRV減速機組合表 ( $n_1=1400\text{r/min}$ )

NMRV Possible geometrical combinations ( $n_1=1400\text{r/min}$ )

NMRV		5	7.5	10	15	20	25	30	40	50	60	80	100
025	60W						NO						
	90W						NO						

030	60W												
	90W												
	120W												
	180W												

040	60W	●	●	●	●	●	●	●	●				
	90W	●	●	●	●	●	●	●	●				
	120W												
	180W												
	250W												
	370W												
	550W												

050	120W	●	●	●	●	●	●	●	●				
	180W	●	●	●	●	●	●	●	●				
	250W												
	370W												
	550W												
	750W												

063	250W	X	●	●	●	●	●	●	●	●	●	●	
	370W	X	●	●	●	●	●	●	●				
	550W	X	●	●									
	750W	X											
	1100W	X											
	1500W	X											

075	550W	X	●	●	●	●	●	●	●				
	750W	X	●	●	●	●	●	●					
	1100W	X											
	1500W	X											
	2200W	X											
	3000W	X											
	4000W	X											

# R系列蜗輪減速機

## R Series RV Gear Motor

NMRV減速機選型表 Gear unit selection tables

NMRV		5	7.5	10	15	20	25	30	40	50	60	80	100
090	750W	X	●	●	●	●	●	●	●				
	1100W	X	●	●	●	●	●	●	●				
	1500W	X	●	●	●	●							
	2200W	X											
	3000W	X											
	4000W	X											
110	1100W	X	●	●	●	●	●	●	●				
	1500W	X	●	●	●	●	●	●	●				
	2200W	X											
	3000W	X											
	4000W	X											
	5500W	X											
130	1500W	X	●	●	●	●	●	●	●	●	●		
	2200W	X	●	●	●	●	●	●	●				
	3000W	X	●	●	●	●	●	●	●				
	4000W	X											
	5500W	X											
	7500W	X											
150	2200W	X	●	●	●	●	●	●	●				
	3000W	X	●	●	●	●	●	●	●				
	4000W	X	●	●	●	●	●						
	5500W	X	●	●	●	●							
	7500W	X	●	●	●	●							
	11000W	X											
	15000W	X											

注：●表示允许但不推荐的配置，空格部分为不允许的配置，X表示无此速比规格。

NOTE : ●Means allowed but not recommended configurations; space parts means unallowed configurations, X means no this ratio.

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

NMRV+SM伺服減速機組合表( $n_1=1500\text{r/min}$ )

NMRV+SM Servo gear unit possible geometrical combinations( $n_1=1500\text{r/min}$ )

NMRV	SM	5	7.5	10	15	20	25	30	40	50	60	80	100
040	100W												
	200W												
050	100W	●	●	●	●	●	●	●	●				
	200W	●	●	●	●	●	●	●	●				
	400W												
	500W												
063	750W												
	200W	X	●	●	●	●	●	●	●	●	●	●	
	400W	X	●	●	●	●	●	●	●				
	500W	X	●	●									
	750W	X											
075	1000W	X											
	1500W	X											
	2000W	X											
	3000W	X											
	4000W	X											
	500W	X	●	●	●	●	●	●	●				
090	750W	X	●	●	●	●	●	●	●				
	1000W	X	●	●	●	●	●	●	●				
	1500W	X	●	●	●	●	●	●	●				
	2000W	X											
	3000W	X											
110	4000W	X											
	5000W	X											
	7500W	X											
	1000W	X	●	●	●	●	●	●	●	●	●	●	
	1500W	X	●	●	●	●	●	●	●	●	●	●	
	2000W	X											

**R系列 蝶輪減速機**  
R Series RV Gear Motor

NMRV減速機選型表 Gear unit selection tables

NMRV	SM	5	7.5	10	15	20	25	30	40	50	60	80	100
130	1500W	X	●	●	●	●	●	●	●	●	●	●	
	2000W	X	●	●	●	●	●	●	●				
	3000W	X	●	●	●	●	●	●					
	4000W	X											
	5000W	X											
	7500W	X											
150	2000W	X	●	●	●	●	●	●	●				
	3000W	X	●	●	●	●	●	●					
	4000W	X	●	●	●	●	●						
	5000W	X	●	●	●	●							
	7500W	X	●	●	●	●							
	11000W	X											
	15000W	X											

注: ●表示允许但不推荐的配置, 空格部分为不允许的配置, X表示无此速比规格。

NOTE: ●Means allowed but not recommended configurations, space parts means unallowed configurations,  
X means no this ratio.

NMRV+NEMA減速机组合表 / Possible geometrical combinations

NMRV	NEMA Flange	Available Ratios											
		5	7.5	10	15	20	25	30	40	50	60	80	100
030	48C												
040	56C												
050	56C												
063	56C												
	140TC												
075	56C												
	140TC												
	180TC												
090	56C												
	140TC												
	180TC												
110	56C												
	140TC												
	180TC												
	210TC												
130	56C												
	140TC												
	180TC												
	210TC												
150	180TC												
	210TC												

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

◆ NMRV...IEC...性能參數/Performance parameter

$P_{ie}$ (kW)	$n_2$ (r/min)	i	$M_{2e}$ (Nm)	$F_{te}$ (N)	f <sub>s</sub>		
0.06	280	5	1.8	439	6.2	NMRV025 56B14	5614
	186.7	7.5	2.6	503	4.2		
	140	10	3.4	553	3.5		
	93.3	15	4.9	633	2.5		
	70	20	6.2	697	1.9		
	46.7	30	8.3	798	1.6		
	35	40	10	878	1.2		
	28	50	12	946	0.9		
	23.3	60	14	1006	0.7		
	186.7	7.5	2.6	683	7.0		
0.09	140	10	3.4	752	5.4	NMRV030 56B14	5614
	93.3	15	4.7	861	3.9		
	70	20	6	948	3.1		
	56	25	7	1021	3.1		
	46.7	30	8	1085	2.5		
	35	40	9.7	1194	1.9		
	28	50	11	1286	1.5		
	23.3	60	13	1367	1.3		
	17.5	80	14	1504	0.9		
	373.3	7.5	2.0	399	3.9		
0.09	280	10	2.6	439	3.4	NMRV025 56B14	5612
	186.7	15	3.8	503	2.4		
	140	20	4.9	553	1.8		
	93.3	30	6.7	633	1.3		
	70	40	8.5	697	1.1		
	56	50	10	751	0.9		
	186.7	7.5	3.9	503	2.8		
	140	10	5.1	553	2.4		
	93.3	15	7.3	633	1.6		
	70	20	9.3	697	1.3		
0.12	46.7	30	13	798	1.0	NMRV025 56B14	5624
	35	40	16	878	0.8		
	373.3	7.5	2.0	542	6.5		
	280	10	2.6	597	5.0		
	186.7	15	3.7	683	3.5		
	140	20	4.7	752	2.5		
0.18	112	25	5.5	810	2.9	NMRV030 56B14	5612
	93.3	30	6.4	861	2.3		
	186.7	7.5	3.7	683	3.5		

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

◆ NMRV...IEC...性能參數/Performance parameter

$P_{op}$ (kW)	$n_2$ (r/min)	i	$M_{2n}$ (Nm)	$F_{d2}$ (N)	fs		
0.09	70	40	8.0	948	1.8	<b>NMRV030 56B5/B14</b>	5612
	56	50	9.4	1021	1.4		
	46.7	60	10	1085	1.1		
	35	80	13	1194	0.9		
	186.7	7.5	3.9	683	4.7	<b>NMRV030 56B5/B14</b>	5624
	140	10	5.0	752	3.6		
	93.3	15	7.0	861	2.6		
	70	20	8.8	948	2.0		
	56	25	10	1021	2.1		
	46.7	30	12	1085	1.7		
	35	40	14	1194	1.2		
	28	50	17	1286	1.0		
	23.3	60	18	1367	0.9		
	28	50	19	2475	2.1	<b>NMRV040 56B5</b>	5624
	23.3	60	21	2630	1.7		
	17.5	80	25	2895	1.3		
	14	100	29	3118	1.0		
0.12	373.3	7.5	2.7	399	3.0	<b>NMRV025 56B14</b>	5622
	280	10	3.5	439	2.6		
	186.7	15	5.1	503	1.8		
	140	20	6.5	553	1.4		
	93.3	30	9.0	633	1.0		
	70	40	11	697	0.8		
	186.7	7.5	5.2	683	3.5	<b>NMRV030 63B5/B14</b>	6314
	140	10	6.6	752	2.7		
	93.3	15	9.3	861	1.9		
	70	20	12	948	1.5		
	56	25	14	1021	1.6		
	46.7	30	16	1085	1.3		
	35	40	19	1194	0.9		
	28	50	22	1286	0.8		
	46.7	30	17	2087	2.7		
	35	40	21	2298	1.9		
	28	50	25	2475	1.6		
	23.3	60	28	2630	1.3	<b>NMRV040 63B5/B14</b>	6314
	17.5	80	33	2895	1.0		
	14	100	38	3118	0.8		
	23.3	60	29	3610	2.3		
	17.5	80	35	3973	1.9		

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

◆ NMRV...IEC...性能參數/Performance parameter

$P_{z2}$ (kW)	$n_{z2}$ (r/min)	i	$M_{z2}$ (Nm)	$F_{z2}$ (N)	fz		
0.12	14	100	39	4280	1.4	NMRV050 63B5	6314
	373.3	7.5	4.0	542	3.2		
	280	10	5.2	597	2.5		
	186.7	15	7.4	683	1.8		
	140	20	9.5	752	1.3	NMRV030 63B5/B14	6312
	112	25	11	810	1.4		
	93.3	30	13	861	1.2		
	70	40	16	948	0.9		
	186.7	7.5	7.7	683	2.3		
	140	10	10	752	1.8		
	93.3	15	14	861	1.3	NMRV030 63B5/B14	6324
	70	20	18	948	1.0		
	56	25	20	1021	1.0		
	46.7	30	24	1085	0.8		
	93.3	30	14	1657	2.5		
	70	40	17	1824	1.8	NMRV040 63B5/B14	6312
	56	50	21	1964	1.4		
0.18	70	20	19	1824	2.1		
	56	25	23	1964	1.7		
	46.7	30	25	2087	1.8	NMRV040 63B5/B14	6324
	35	40	32	2298	1.3		
	28	50	37	2475	1.0		
	23.3	60	42	2630	0.9		
	45	20	28	2113	1.6		
	36	25	34	2276	1.3	NMRV040 71B5/B14	7116
	30	30	38	2419	1.3		
	22.5	40	47	2662	1.0		
	46.7	60	24	2865	2.1		
	35	80	30	3153	1.5	NMRV050 63B5	6312
	28	100	34	3397	1.2		
0.37	35	40	33	3153	2.3		
	28	50	39	3397	1.9		
	23.3	60	43	3610	1.6	NMRV050 63B5	6324
	17.5	80	52	3973	1.2		
	14	100	59	4280	0.9		
	18	50	56	3936	1.4	NMRV050 71B5/B14	7116
	15	60	63	4183	1.1		
	11.3	80	75	4604	0.9		
0.55	15	60	66	5467	2.1	NMRV063 71B5/B14	7116

**R系列 蝶輪減速機**  
R Series RV Gear Motor

NMRV減速機選型表 Gear unit selection tables

◆NMRV...IEC...性能參數/Performance parameter

P <sub>in</sub> (kW)	n <sub>z</sub> (r/min)	i	M <sub>20</sub> (Nm)	F <sub>z2</sub> (N)	f <sub>s</sub>	71B5/B14	63B5/B14
0.18	11.3	80	79	6018	1.6	NMRV063 71B5/B14	7116
	9	100	90	6270	1.4		
	373.3	7.5	5.6	542	2.3		
	280	10	7.2	597	1.8		
	186.7	15	10	683	1.3		
	140	20	13	752	0.9		
	112	25	15	810	1.0		
	93.3	30	18	861	0.8		
	186.7	7.5	11	1315	3.6		
	140	10	14	1447	2.8		
0.25	93.3	15	20	1657	2.0	NMRV040 71B5/B14	7114
	70	20	26	1824	1.5		
	56	25	32	1964	1.2		
	46.7	30	35	2087	1.3		
	35	40	44	2298	0.9		
	120	7.5	17	1524	2.6		
	90	10	22	1677	2.0		
	60	15	31	1920	1.4		
	45	20	39	2113	1.1		
	36	25	48	2276	0.9		
0.37	30	30	53	2419	0.9	NMRV050 71B5/B14	7126
	35	80	42	3153	1.1		
	28	100	48	3397	0.8		
	70	20	27	2503	2.7		
	56	25	32	2696	2.2		
	46.7	30	36	2865	2.3		
	35	40	46	3153	1.7		
	28	50	54	3397	1.4		
	23.3	60	60	3610	1.1		
	17.5	80	72	3973	0.9		
0.55	45	20	40	2900	1.9	NMRV050 71B5/B14	7126
	36	25	48	3124	1.5		
	30	30	54	3320	1.7		
	22.5	40	67	3654	1.2		
	18	50	78	3936	1.0		
	15	60	88	4183	0.8		
	28	50	55	4440	2.4		
	23.3	60	63	4719	2.0		
	17.5	80	76	5193	1.6		

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

◆NMRV...IEC...性能參數/Performance parameter

$P_{2s}$ (kW)	$n_2$ (r/min)	i	$M_{2s}$ (Nm)	$F_{2s}$ (N)	fs		
0.25	14	100	87	5595	1.4	<b>NMRV063</b> 71B5/B14	7114
	18	50	81	5145	1.8		
	15	60	92	5467	1.5	<b>NMRV063</b> 71B5/B14	7126
	11.3	80	110	6018	1.2		
	9	100	125	6270	1.0		
	17.5	80	80	6130	2.4	<b>NMRV075</b> 71B5	7114
	14	100	94	6603	1.9		
	11.3	80	117	7103	1.7	<b>NMRV075</b> 71B5	7126
	9	100	133	7380	1.4		
	373.3	7.5	8.3	1044	3.4		
0.37	280	10	11	1149	2.6	<b>NMRV040</b> 71B5/B14	7112
	186.7	15	16	1315	1.9		
	140	20	20	1447	1.4		
	112	25	25	1559	1.1		
	186.7	7.5	16	1315	2.5		
	140	10	21	1447	1.9		
	93.3	15	30	1657	1.3		
	70	20	39	1824	1.0		
	56	25	47	1964	0.8		
	46.7	30	52	2087	0.9		
0.55	112	25	25	2140	2.0	<b>NMRV050</b> 71B5/B14	7112
	93.3	30	29	2274	2.2		
	70	40	37	2503	1.6		
	56	50	44	2696	1.2		
	46.7	60	50	2865	1.0		
	35	80	62	3153	0.7		
	140	10	21	1987	3.4		
	93.3	15	31	2274	2.4		
	70	20	39	2503	1.9		
	56	25	47	2696	1.5		
0.75	46.7	30	54	2865	1.6	<b>NMRV050</b> 71B5/B14	7124
	35	40	68	3153	1.1		
	28	50	80	3397	0.9		
	23.3	60	89	3610	0.8		
	120	7.5	25	2091	3.4		
	90	10	33	2302	2.6		
	60	15	47	2635	1.8		
	45	20	59	2900	1.3		
	36	25	72	3124	1.0		

NMRV減速機選型表 Gear unit selection tables

◆NMRV...IEC...性能參數/Performance parameter

$P_{2e}$ (kW)	$n_2$ (r/min)	i	$M_{2e}$ (Nm)	$F_{12}$ (N)	fs		
0.37	30	30	80	3320	1.1	NMRV050 80B5/B14	8016
	35	40	70	4122	2.1		
	28	50	82	4440	1.6		
	23.3	60	94	4719	1.4	NMRV063 71B5/B14	7124
	17.5	80	113	5193	1.1		
	14	100	129	5595	0.9		
	45	20	60	3791	2.4		
	36	25	73	4084	1.9		
	30	30	82	4339	2.1	NMRV063 80B5/B14	8016
	22.5	40	102	4776	1.6		
	18	50	120	5145	1.2		
	15	60	137	5467	1.0		
0.55	23.3	60	97	5569	2.1		
	17.5	80	119	6130	1.6	NMRV075 71B5	7124
	14	100	139	6603	1.3		
	18	50	124	6073	1.8		
	15	60	141	6453	1.5	NMRV075 80B5/B14	8016
	11.3	80	173	7103	1.2		
	9	100	196	7380	1.0		
	11.3	80	185	7859	1.7	NMRV090 80B5/B14	8016
	9	100	212	8180	1.3		
	373.3	7.5	12	1044	2.3		
	280	10	16	1149	1.8		
	186.7	15	24	1315	1.3	NMRV040 71B5/B14	7122
0.55	140	20	30	1447	1.0		
	112	25	37	1559	0.8		
	140	20	31	1987	1.7		
	112	25	38	2140	1.4		
	93.3	30	43	2274	1.5	NMRV050 71B5/B14	7122
	70	40	55	2503	1.1		
	56	50	65	2696	0.8		
	46.7	60	74	2865	0.7		
	186.7	7.5	24	1805	2.9		
	140	10	32	1987	2.3		
	93.3	15	46	2274	1.6	NMRV050 80B5/B14	8014
	70	20	59	2503	1.2		
	56	25	70	2696	1.0		
	46.7	30	80	2865	1.1		

NMRV減速機選型表 Gear unit selection tables

◆NMRV...IEC...性能參數/Performance parameter

$P_{in}$ (kW)	$n_2$ (r/min)	i	$M_{2n}$ (Nm)	$F_{22}$ (N)	f <sub>s</sub>		
0.55	120	7.5	37	2091	2.3	NMRV050 80B5/B14	8026
	90	10	48	2302	1.7		
	60	15	69	2635	1.2		
	45	20	88	2900	0.9		
	70	40	56	3272	1.9		
	56	50	68	3524	1.5	NMRV063 71B5/B14	7122
	46.7	60	78	3745	1.2		
	35	80	96	4122	0.9		
	28	100	111	4440	0.7		
	70	20	60	3272	2.2	NMRV063 80B5/B14	8014
	56	25	72	3524	1.8		
	46.7	30	82	3745	1.9		
	35	40	104	4122	1.4		
	28	50	122	4440	1.1		
	23.3	60	140	4719	0.9		
	60	15	70	3444	2.2	NMRV063 80B5/B14	8026
	45	20	90	3791	1.6		
	36	25	108	4084	1.3		
	30	30	123	4339	1.4		
	22.5	40	152	4776	1.1		
	35	80	99	4865	1.3	NMRV075 71B5	7122
	28	100	116	5241	1.0		
	35	40	108	4865	2.0	NMRV075 80B5/B14	8014
	28	50	128	5241	1.6		
	23.3	60	144	5569	1.4		
	17.5	80	177	6130	1.1		
	14	100	206	6603	0.9		
	30	30	124	5122	2.1	NMRV075 80B5/B14	8026
	22.5	40	156	5637	1.5		
	18	50	184	6073	1.2		
	15	60	210	6453	1.0		
	17.5	80	189	6783	1.5	NMRV090 80B5/B14	8014
	14	100	221	7306	1.2		
	18	50	196	6719	2.0		
	15	60	224	7140	1.6	NMRV090 80B5/B14	8026
	11.3	80	275	7859	1.1		
	9	100	315	8180	0.9		
	17.5	80	201	8571	2.6	NMRV110 80B5	8014
	14	100	236	9232	2.0		

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

**NMRV減速機選型表 Gear unit selection tables**

◆NMRV...IEC...性能參數/Performance parameter

$P_{2s}$ (kW)	$n_2$ (r/min)	i	$M_{2s}$ (Nm)	$F_{t2}$ (N)	fs		
0.55	11.3	80	294	9931	1.9	NMRV110 80B5	8026
	9	100	344	10320	1.5		
	373.3	7.5	17	1433	3.0		
	280	10	22	1577	2.4		
	186.7	15	31	1805	1.7		
	140	20	41	1987	1.3		
	112	25	49	2140	1.0		
	93.3	30	56	2274	1.1		
	280	5	23	1577	2.7		
	186.7	7.5	33	1805	2.1		
0.75	140	10	43	1987	1.7	NMRV050 80B5/B14	8012
	93.3	15	62	2274	1.2		
	70	20	80	2503	0.9		
	140	20	43	2597	2.3		
	112	25	52	2797	1.8		
	93.3	30	60	2973	2.0		
	70	40	77	3272	1.4		
	56	50	92	3524	1.1		
	46.7	60	106	3745	0.9		
	93.3	15	63	2973	2.2		
1.1	70	20	82	3272	1.6	NMRV063 80B5/B14	8024
	56	25	98	3524	1.3		
	46.7	30	112	3745	1.4		
	35	40	141	4122	1.0		
	120	7.5	51	2734	2.9		
	90	10	67	3009	2.3		
	60	15	96	3444	1.6		
	45	20	123	3791	1.2		
	36	25	147	4084	0.9		
	30	30	167	4339	1.0		
1.5	46.7	60	107	4421	1.3	NMRV075 90B5/B14	8012
	35	80	135	4865	1.0		
	28	100	159	5241	0.8		
	56	25	101	4160	2.0		
	46.7	30	117	4421	2.0		
	35	40	147	4865	1.5		
	28	50	174	5241	1.2		
	23.3	60	196	5569	1.0		
	60	15	97	4065	2.4		

R系列 蝶輪減速機  
R Series RV Gear Motor

NMRV減速機選型表 Gear unit selection tables

◆NMRV...IEC...性能參數/Performance parameter

$P_2$ (kW)	$n_2$ (r/min)	i	$M_{2n}$ (Nm)	$F_2$ (N)	fs		
0.75	45	20	124	4474	1.9	NMRV075 90B5/B14	90S6
	36	25	149	4820	1.4		
	30	30	170	5122	1.5		
	22.5	40	213	5637	1.1		
	35	80	143	5383	1.6	NMRV090 80B5/B14	8012
	28	100	169	5799	1.2		
	28	50	182	5799	1.9		
	23.3	60	209	6163	1.5		
	17.5	80	258	6783	1.1	NMRV090 80B5/B14	8024
	14	100	302	7306	0.9		
1.1	30	30	179	5667	2.6		
	22.5	40	226	6238	1.8	NMRV090 80B5/B14	90S6
	18	50	267	6719	1.5		
	15	60	306	7140	1.1		
	17.5	80	274	8571	1.9	NMRV110 80B5	8024
	14	100	322	9232	1.5		
	15	60	325	9023	2.1	NMRV110 90B5	90S6
	11.3	80	401	9931	1.4		
	9	100	470	10320	1.1		
	11.3	80	401	12989	2.1	NMRV130 90B5	90S6
	9	100	470	13500	1.7		
1.5	373.3	7.5	25	1433	2.1	NMRV050 80B5/B14	8022
	280	10	33	1577	1.7		
	186.7	15	48	1805	1.2		
	140	20	62	1987	0.9		
	186.7	15	46	2359	2.1	NMRV063 80B5/B14	8022
	140	20	60	2597	1.6		
	112	25	72	2797	1.2		
	93.3	30	82	2973	1.4		
	70	40	104	3272	1.0	NMRV063 90B5/B14	90L6
	120	7.5	75	2734	2.0		
	90	10	98	3009	1.6		
	60	15	140	3444	1.1		
2.2	45	20	180	3791	0.8	NMRV063 90B5/B14	90S4
	186.7	7.5	50	2359	2.6		
	140	10	65	2597	2.0		
	93.3	15	92	2973	1.5		
	70	20	120	3272	1.1		
	56	25	144	3524	0.9		

NMRV減速機選型表 Gear unit selection tables

◆ NMRV...IEC...性能參數/Performance parameter

P <sub>o</sub> (kW)	n <sub>s</sub> (r/min)	i	M <sub>o</sub> (Nm)	F <sub>o</sub> (N)	f <sub>s</sub>		
1.1	46.7	30	164	3745	1.0	NMRV063 90B5/B14	90S4
	112	25	77	3302	2.0		
	93.3	30	89	3509	1.9		
	70	40	114	3862	1.4	NMRV075 80B5/B14	8022
	56	50	137	4160	1.1		
	46.7	60	158	4421	0.9		
	90	10	98	3551	2.3		
	60	15	142	4065	1.7		
	45	20	182	4474	1.3	NMRV075 90B5/B14	90L6
	36	25	19	4820	1.0		
	30	30	249	5122	1.0		
	93.3	15	95	3509	2.1		
	70	20	122	3862	1.7		
	56	25	148	4160	1.3	NMRV075 90B5/B14	90S4
	46.7	30	171	4421	1.3		
	35	40	216	4865	1.0		
	35	80	210	5383	1.1	NMRV090 80B5/B14	8022
	28	100	248	5799	0.8		
	36	25	228	5333	1.6		
	30	30	263	5667	1.8	NMRV090 90B5/B14	90L6
	22.5	40	331	6238	1.2		
	18	50	391	6719	1.0		
	15	60	448	7140	0.8		
	35	40	222	5383	1.6		
	28	50	266	5799	1.3	NMRV090 90B5/B14	90S4
	23.3	60	306	6163	1.0		
	22.5	40	345	7882	2.3		
	18	50	414	8491	1.8	NMRV110 90B5	90L6
	15	60	476	9023	1.4		
	11.3	80	588	9931	1.0		
	28	50	278	7328	2.4		
	23.3	60	324	7787	1.9	NMRV110 90B5	90S4
	17.5	80	402	8571	1.3		
	14	100	473	9232	1.0		
	11.3	80	588	12989	1.5	NMRV130 90B5	90L6
	9	100	689	13500	1.1		
	17.5	80	408	11210	2.1	NMRV130 90B5	90S4
	14	100	480	12076	1.5		

R系列 蝶輪減速機  
R Series RV Gear Motor

NMRV減速機選型表 Gear unit selection tables

◆NMRV...IEC...性能參數/Performance parameter

P <sub>2</sub> <sub>in</sub> (kW)	n <sub>2</sub> (r/min)	i	M <sub>2i</sub> (Nm)	F <sub>f2</sub> (N)	f <sub>s</sub>		
1.5	373.3	7.5	34	1433	1.5	NMRV050 80B5/B14	8032
	280	10	45	1577	1.2		
	186.7	15	65	1805	0.9	NMRV063 90B5/B14	90L4
	186.7	7.5	68	2359	1.9		
	140	10	88	2597	1.5		
	93.3	15	126	2973	1.1		
	70	20	164	3272	0.8		
	373.3	7.5	35	1873	2.7		
	280	10	45	2061	2.2		
	186.7	15	66	2359	1.6	NMRV063 90B5/B14	90S2
	140	20	86	2597	1.2		
	112	25	105	2797	0.9		
	93.3	30	120	2973	1.0		
3	120	7.5	103	3227	2.1	NMRV075 100B5/B14	100L6
	90	10	134	3551	1.7		
	60	15	193	4065	1.2		
	56	50	187	4160	1.3	NMRV075 90B5/B14	90S2
	46.7	60	215	4421	1.1		
	140	10	89	3065	2.2		
	93.3	15	129	3509	1.6	NMRV075 90B5/B14	90L4
	70	20	166	3862	1.3		
	56	25	202	4160	1.0		
	46.7	30	233	4421	1.0		
	280	10	45	2433	3.2		
5	186.7	15	66	2785	2.3	NMRV075 90B5/B14	90S2
	140	20	86	3065	1.9		
	112	25	105	3302	1.4		
	93.3	30	121	3509	1.4		
	70	40	156	3862	1.1		
	90	10	137	3929	2.7	NMRV090 100B5/B14	100L6
	60	15	198	4498	2.1		
	45	20	258	4951	1.5		
	36	25	310	5333	1.2		
7.5	30	30	358	5667	1.3	NMRV090 90B5/B14	90L4
	70	20	170	4273	2.1		
	56	25	207	4603	1.6		
	46.7	30	239	4891	1.7		
	35	40	303	5383	1.2		
	28	50	363	5799	0.9		

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

**NMRV減速機選型表 Gear unit selection tables**

◆NMRV...IEC...性能參數/Performance parameter

$P_{\text{S}}$ (kW)	$n_2$ (r/min)	i	$M_{2i}$ (Nm)	$F_{12}$ (N)	f <sub>s</sub>		
1.5	23.3	60	417	6163	0.8	<b>NMRV090 90B5/B14</b>	90L4
	56	50	197	4603	1.3	<b>NMRV090 90B5/B14</b>	90S2
	46.7	60	227	4891	1.1		
	45	20	264	6256	2.7		
	36	25	322	6739	2.4		
	30	30	363	7161	2.3	<b>NMRV110 100B5/B14</b>	100L6
	22.5	40	471	7882	1.7		
	18	50	565	8491	1.3		
	15	60	649	9023	1.1		
	35	40	315	6803	2.2		
	28	50	379	7328	1.7	<b>NMRV110 90B5</b>	90L4
	23.3	60	442	7787	1.4		
	17.5	80	548	8571	0.9		
	46.7	60	236	6181	2.0		
	35	80	299	6803	1.3	<b>NMRV110 90B5</b>	90S2
2.2	28	100	358	7328	1.0		
	22.5	40	471	10309	2.3		
	18	50	565	11105	1.9	<b>NMRV130 100B5</b>	100L6
	15	60	659	11801	1.4		
	11.3	80	802	12989	1.1		
	17.5	80	557	11210	1.5	<b>NMRV130 90B5</b>	90L4
	14	100	655	12076	1.1		
	373.3	7.5	51	1873	1.8		
	280	10	66	2061	1.5	<b>NMRV063 90B5/B14</b>	90L2
	186.7	15	97	2359	1.1		
2.2	186.7	7.5	99	2785	1.9		
	140	10	131	3065	1.5	<b>NMRV075 100B5/B14</b>	100L1-4
	93.3	15	189	3509	1.1		
	373.3	7.5	50	2210	2.6		
	280	10	66	2433	2.2	<b>NMRV075 90B5/B14</b>	90L2
	186.7	15	97	2785	1.5		
	140	20	126	3065	1.3		
	112	25	154	3302	1.0	<b>NMRV075 100B5/B14</b>	90L2
	93.3	30	178	3509	1.0		
	186.7	7.5	100	3081	2.9		
2.2	140	10	132	3391	2.3	<b>NMRV090 100B5/B14</b>	100L1-4
	93.3	15	191	3882	1.9		
	70	20	249	4273	1.4		

NMRV減速機選型表 Gear unit selection tables

◆NMRV...IEC...性能參數/Performance parameter

P <sub>2</sub> (kW)	n <sub>2</sub> (r/min)	i	M <sub>2</sub> (Nm)	F <sub>2</sub> (N)	f <sub>s</sub>		
2.2	56	25	304	4603	1.1	NMRV090 100B5/B14	100L1-4
	46.7	30	351	4891	1.2		
	120	7.5	154	3570	2.2		
	90	10	201	3929	1.8		
	60	15	291	4498	1.4	NMRV090 112B5/B14	112M6
	45	20	378	4951	1.0		
	140	20	129	3391	2.0		
	112	25	159	3653	1.6		
	93.3	30	185	3882	1.7		
	70	40	237	4273	1.2		
	56	50	289	4603	0.9		
	70	20	255	5399	2.5	NMRV110 100B5	100L1-4
	56	25	311	5816	2.2		
	46.7	30	356	6181	2.0		
	35	40	462	6803	1.5		
	28	50	555	7328	1.2		
	23.3	60	648	7787	1.0		
	90	10	203	4965	3.5		
	60	15	294	5684	2.6	NMRV110 112B5	112M6
	45	20	388	6256	1.9		
	36	25	473	6739	1.6		
	30	30	532	7161	1.6		
	112	25	161	4616	3.1	NMRV110 90B5	90L2
	93.3	30	187	4905	3.0		
	70	40	243	5399	2.2		
	56	50	296	5816	1.7		
	46.7	60	347	6181	1.4		
	35	40	468	8897	2.2	NMRV130 100B5	100L1-4
	28	50	563	9584	1.7		
	23.3	60	657	10185	1.4		
	17.5	80	816	11210	1.0		
	36	25	473	8814	2.2		
	30	30	539	9366	2.2	NMRV130 112B5	112M6
	22.5	40	691	10309	1.6		
	18	50	829	11105	1.3		
	15	60	966	11801	1.0		
	35	80	444	8897	1.3		
	28	100	525	9584	1.0	NMRV130 90B5	90L2
	28	50	570	13103	2.5	NMRV150 100B5	100L1-4

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

**NMRV減速機選型表 Gear unit selection tables**

◆ NMRV...IEC...性能参数 Performance parameter

P <sub>in</sub> (kW)	n <sub>2</sub> (r/min)	i	M <sub>2s</sub> (Nm)	F <sub>s</sub> (N)	f <sub>s</sub>			
2.2	23.3	60	657	13924	1.9	NMRV150 100B5	100L1-4	
	17.5	80	816	15325	1.4			
	14	100	960	16508	1.0			
	373.3 7.5 68 2210 1.9				NMRV075 100B5/B14	100L2		
	280	10	90	2433	1.6			
	186.7	7.5	135	2785	1.4			
	140	10	178	3065	1.1			
	93.3	15	258	3509	0.8			
	373.3 7.5 70 2446 3.0							
	280	10	92	2692	2.6			
	186.7 7.5 137 3081 2.1				NMRV090 100B5/B14	100L2		
	140	10	180	3391	1.7			
	93.3	15	261	3882	1.4			
	70	20	340	4273	1.0			
	56	25	414	4603	0.8			
	46.7	30	479	4891	0.9			
3.0	93.3	15	264	4905	2.5	NMRV110 100B5	100L2-4	
	70	20	348	5399	1.9			
	56	25	425	5816	1.6			
	46.7	30	485	6181	1.5			
	35	40	630	6803	1.1			
	28	50	757	7328	0.9			
	120 7.5 210 4511 3.1				NMRV110 100B5	132S6		
	90	10	277	4965	2.6			
	60	15	401	5684	1.9			
	45	20	528	6256	1.4			
	56	25	430	7607	2.2	NMRV130 100B5	100L2-4	
	46.7	30	491	8084	2.1			
	35	40	638	8897	1.6			
	28	50	767	9584	1.3			
	23.3	60	896	10185	1.0			
	17.5	80	1113	11210	0.8			
	90 10 277 6494 3.5				NMRV130 132B5	132S6		
	60	15	406	7434	2.6			
	45	20	528	8182	2.0			
	36	25	645	8814	1.6			
	30	30	735	9366	1.6			
	22.5	40	942	10309	1.2			

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

◆ NMRV...IEC...性能参数 Performance parameter

$P_{20}$ (kW)	$n_2$ (r/min)	i	$M_{20}$ (Nm)	$F_{20}$ (N)	fs		
3.0	28	50	778	13103	1.8	NMRV150 100B5	100L2-4
	23.3	60	896	13924	1.4		
	17.5	80	1113	15325	1.0		
	14.0	100	1310	16508	0.8		
	373.3	7.5	91	2210	1.4		
	280	10	120	2433	1.2		
	186.7	7.5	180	2785	1.0		
	140	10	237	3065	0.8		
	373.3	7.5	93	2446	2.3		
	280	10	123	2692	1.9		
4.0	186.7	7.5	182	3081	1.6	NMRV090 11285/B14	112M2
	140	10	240	3391	1.3		
	93.3	15	348	3882	1.0		
	70	20	453	4273	0.8		
	140	10	240	4285	2.5		
	93.3	15	352	4905	1.9		
	70	20	464	5399	1.4		
	56	25	566	5816	1.2		
	46.7	30	647	6181	1.1		
	120	7.5	280	4511	2.3		
5.5	90	10	369	4965	1.9	NMRV110 13285	132M1-6
	60	15	535	5684	1.4		
	56	25	573	7607	1.6		
	46.7	30	655	8084	1.6		
	35	40	851	8897	1.2		
	28	50	1023	9584	1.0		
	23.3	60	1195	10185	0.8		
	120	7.5	283	5901	3.1		
	90	10	369	6494	2.6		
	60	15	541	7434	2.0		
5.5	45	20	705	8182	1.5	NMRV130 11285	112M4
	36	25	860	8814	1.2		
	28	50	1037	13103	1.4		
	23.3	60	1195	13924	1.1		
5.5	17.5	80	1484	15325	0.8	NMRV150 11285	112M4
	186.7	7.5	250	3893	2.2		
	140	10	330	4285	1.8		
	93.3	15	484	4905	1.4		
5.5	70	20	638	5399	1.0	NMRV110 13285	132S4

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV減速機選型表 Gear unit selection tables**

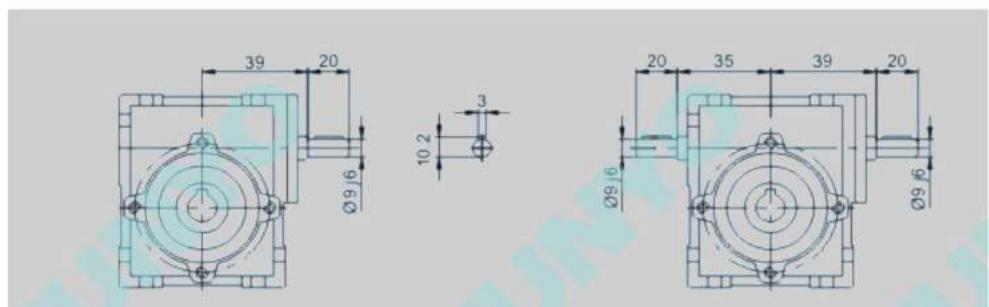
◆ NMRV...IEC...性能参数 Performance parameter

P <sub>2m</sub> (kW)	n <sub>2</sub> (r/min)	i	M <sub>2m</sub> (Nm)	F <sub>2m</sub> (N)	f <sub>s</sub>	132B5	132S4
5.5	140	10	334	5605	2.5	NMRV130 132B5	132S4
	93.3	15	490	6416	1.9		
	70	20	638	7062	1.4		
	56	25	788	7607	1.2		
	46.7	30	900	8084	1.2		
	35	40	1171	8897	0.9		
	70	20	645	9654	2.0		
	56	25	788	10400	1.5		
	46.7	30	934	11051	1.3		
	35.0	40	1171	12163	1.3		
7.5	28.0	50	1426	13103	1.0	NMRV150 132B5	132S4
	23.3	60	1643	13924	0.8		
	186.7	7.5	341	3893	1.6		
	140	10	450	4285	1.3		
	93.3	15	660	4905	1.0		
	186.7	7.5	345	5092	2.2		
	140	10	455	5605	1.8		
	93.3	15	668	6416	1.4		
	70	20	870	7062	1.0	NMRV130 132B5	132M4
	56	25	1074	7607	0.9		
11	46.7	30	1228	8084	0.8		
	35	40	1596	8897	0.7		
	70	20	880	9654	1.5		
	56	25	1074	10400	1.1	NMRV150 132B5	132M4
	46.7	30	1274	11051	0.9		
	35	40	1596	12163	1.0		
	186.7	7.5	512	6962	2.3		
	140	10	675	7663	1.8		
	93.3	15	990	8771	1.3	NMRV150 160B5	160M4
	70	20	1291	9654	1.0		
	56	25	1576	10400	0.8		
15	186.7	7.5	698	6962	1.7		
	140	10	921	7663	1.3		
	93.3	15	1351	8771	0.9		
	70	20	1760	9654	0.7		

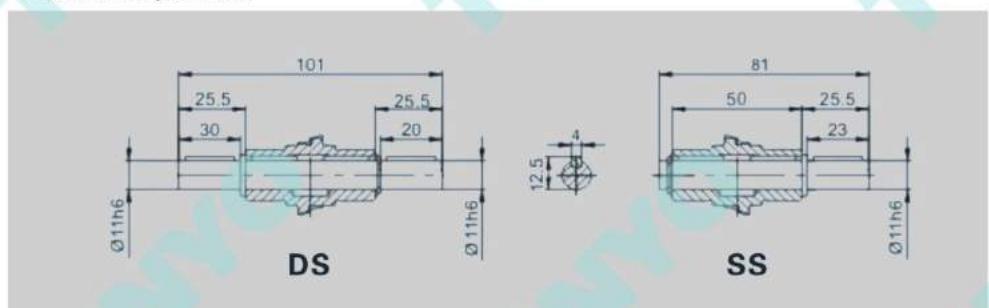
R系列 蝶輪減速機  
R Series RV Gear Motor

**NRV 025**  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
減速比 1:5 ~ 60

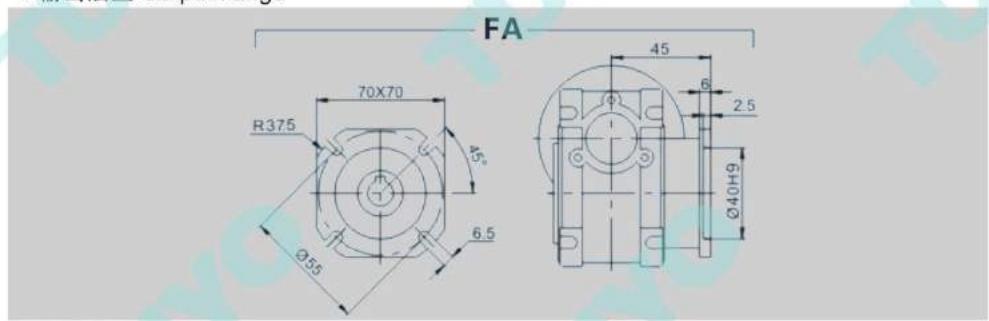
外形尺寸 Dimension



◆ 输出轴 Output shaft



◆ 输出法兰 Output flange

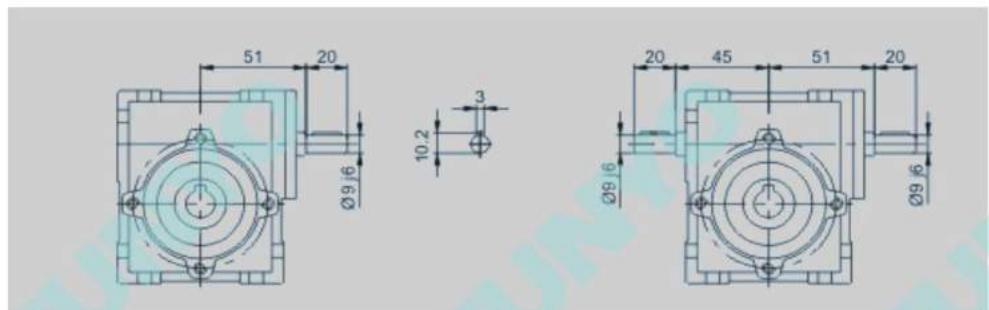


Weight: 1.3kg

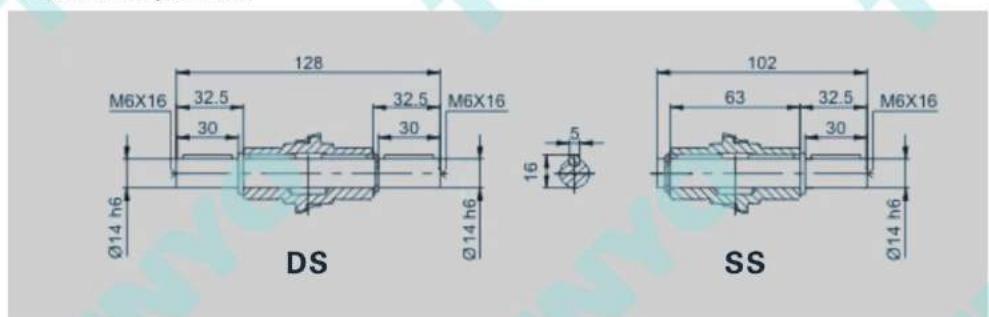
R系列 蝶輪減速機  
R Series RV Gear Motor



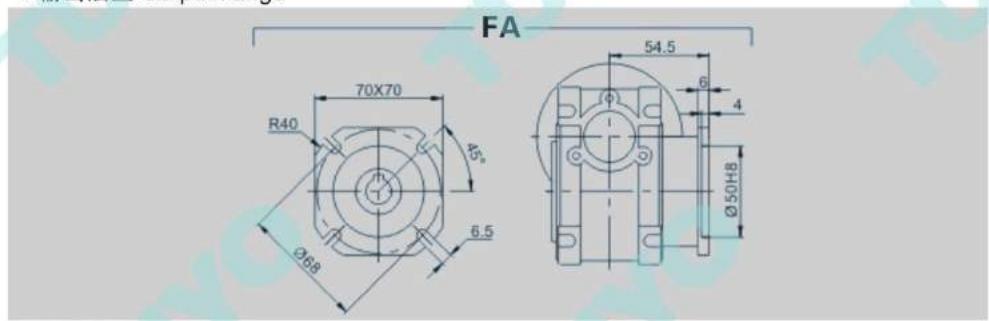
外形尺寸 Dimension



◆ 输出轴 Output shaft



◆ 输出法兰 Output flange



Weight: 1.3kg

R系列 蝶輪減速機  
R Series RV Gear Motor

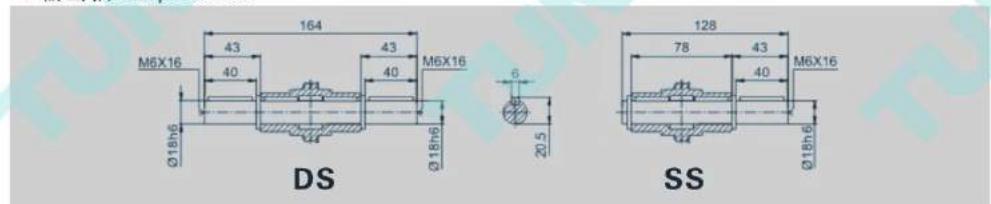
**NRV 040**  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
减速比1:5~100



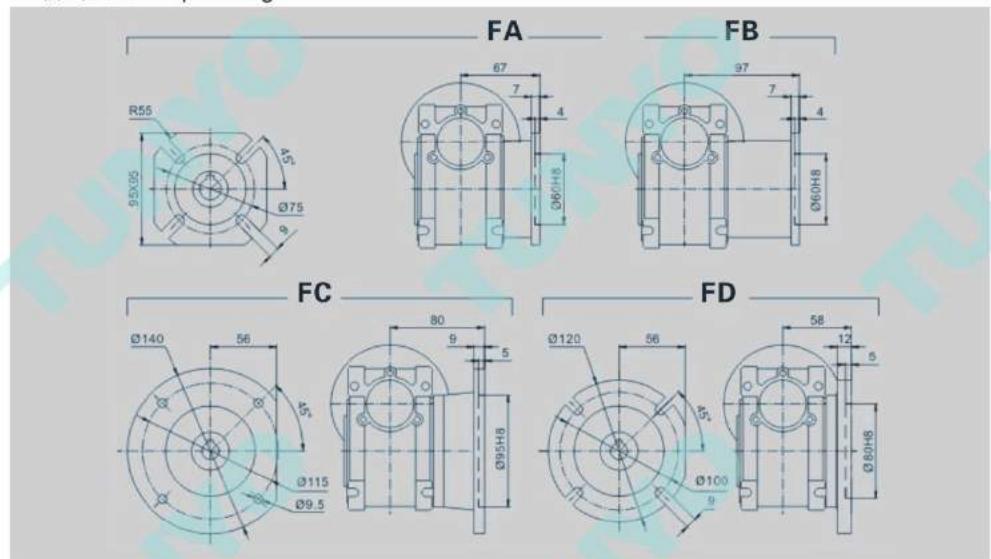
外形尺寸 Dimension



◆ 输出轴 Output shaft



◆ 输出法兰 Output flange

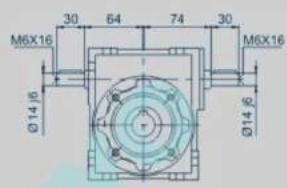
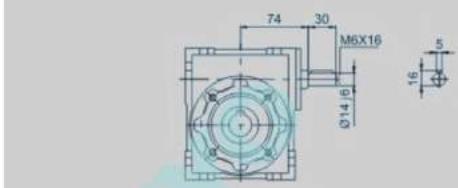


Weight : 2.4kg

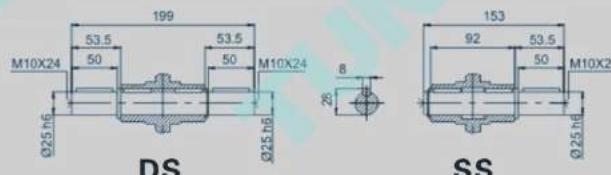
R系列 蝶輪減速機  
R Series RV Gear Motor

**NRV 050**  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
減速比1:5~100

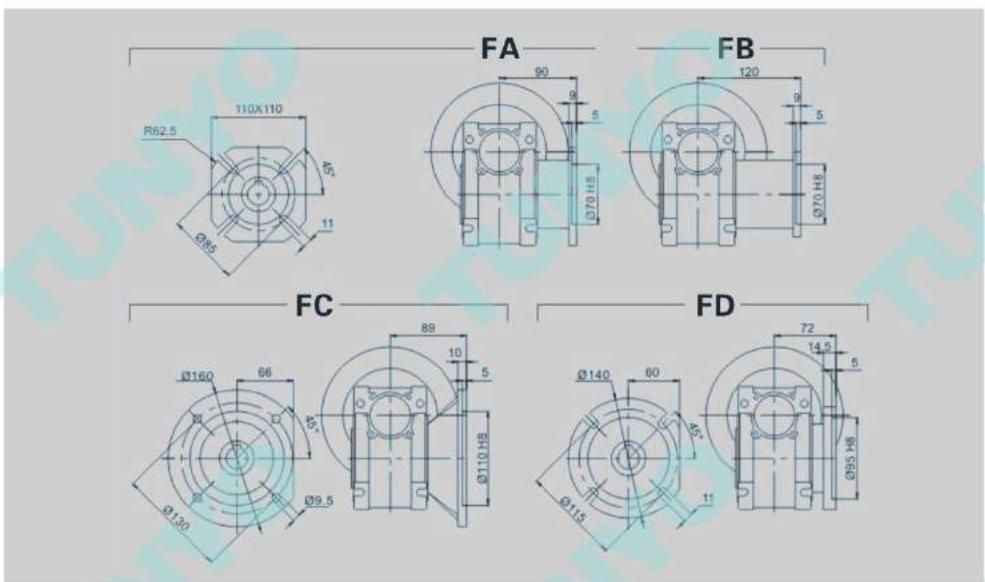
外形尺寸 Dimension



◆ 输出轴 Output shaft



◆ 输出法兰 Output flange

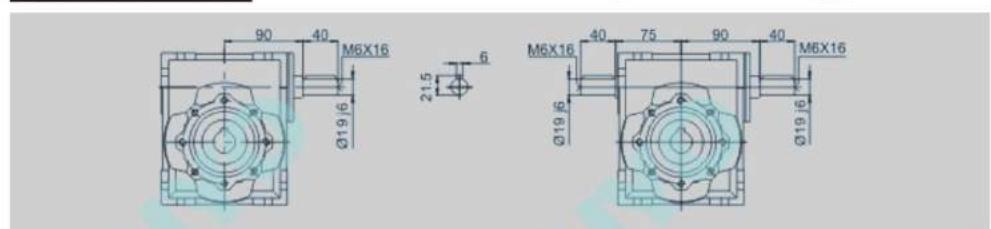


Weight : 3.6kg

R系列 蝶輪減速機  
R Series RV Gear Motor

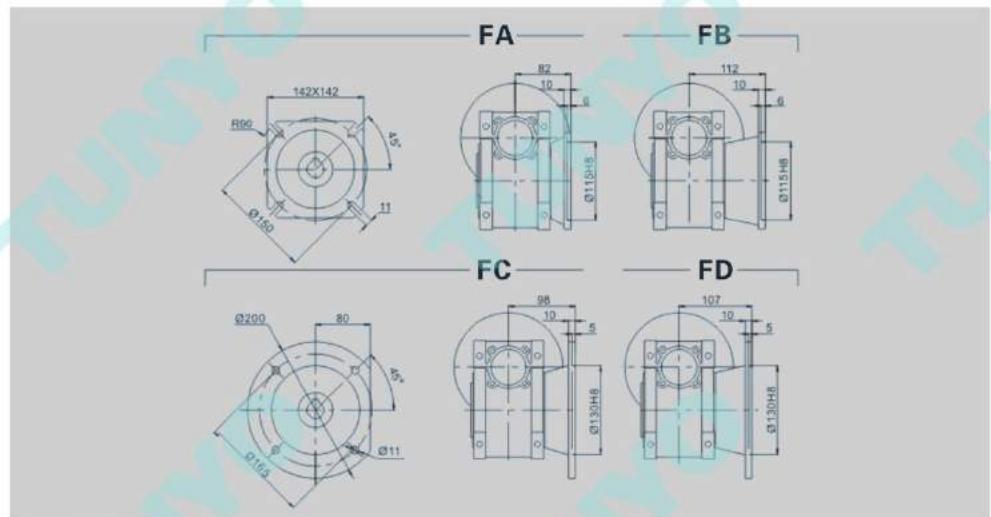
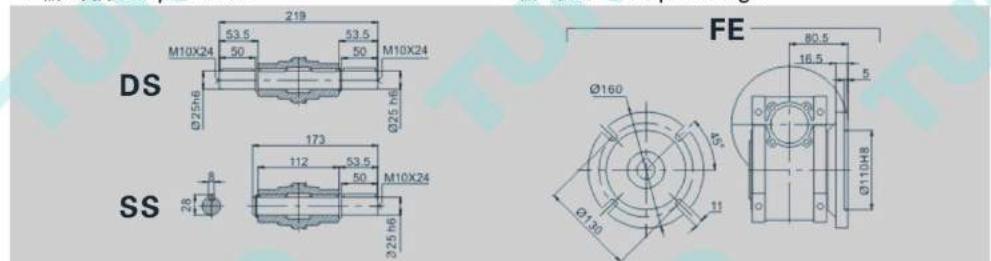
**NRV 063**  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
減速比1:5~100

外形尺寸 Dimension



◆ 输出轴 Output shaft

◆ 输出法兰 Output flange

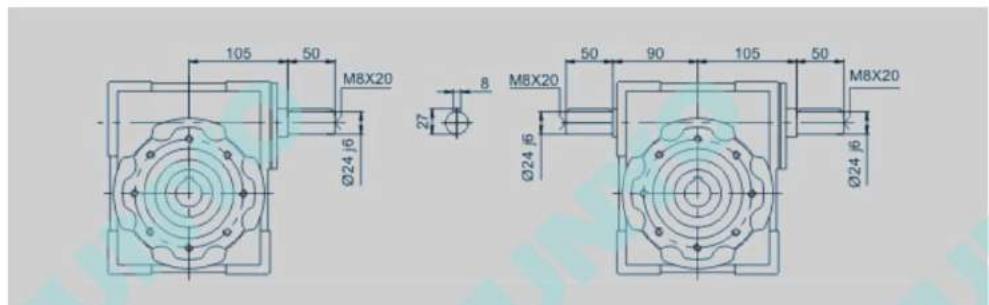


Weight : 6.3kg

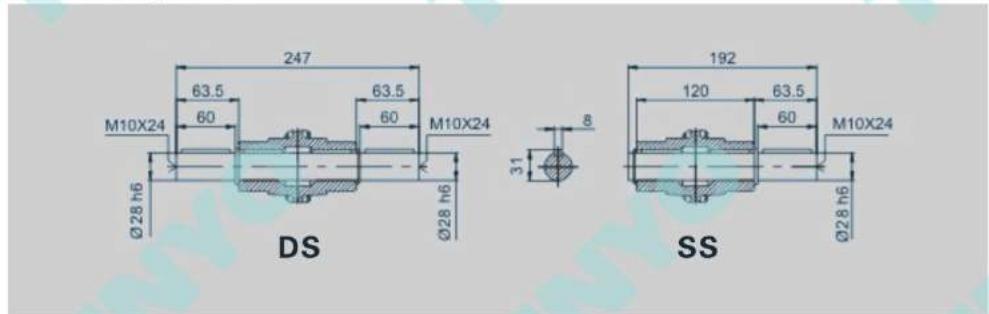
R系列 蝶輪減速機  
R Series RV Gear Motor

**NRV**  
**075**  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
減速比1:5~100

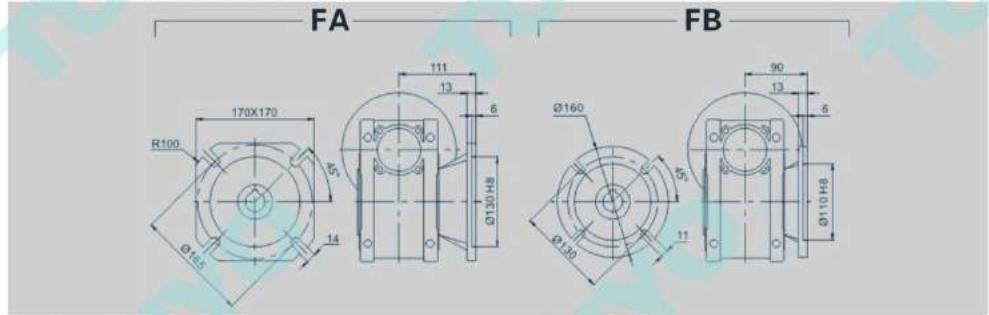
外形尺寸 Dimension



◆ 輸出軸 Output shaft



◆ 輸出法蘭 Output flange

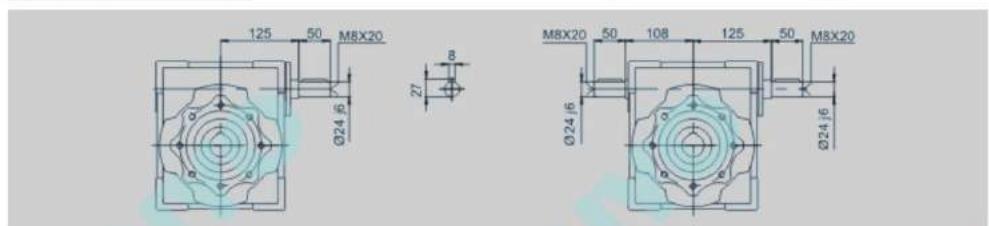


Weight : 9kg

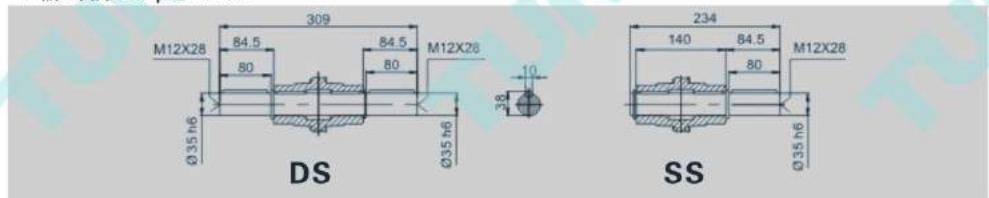
**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NRV 090**  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
減速比1:5~100

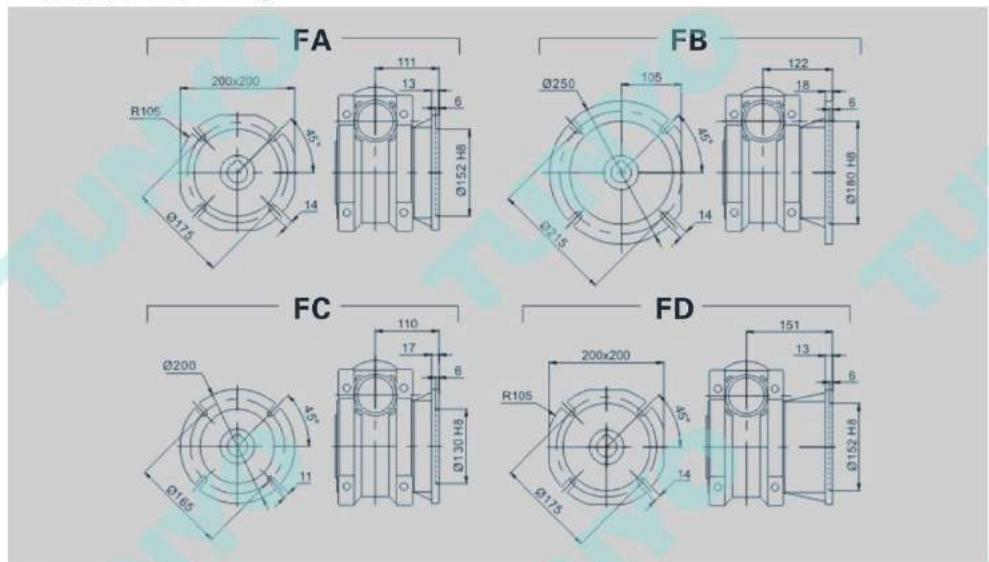
外形尺寸 Dimension



◆ 输出轴 Output shaft



◆ 输出法兰 Output flange

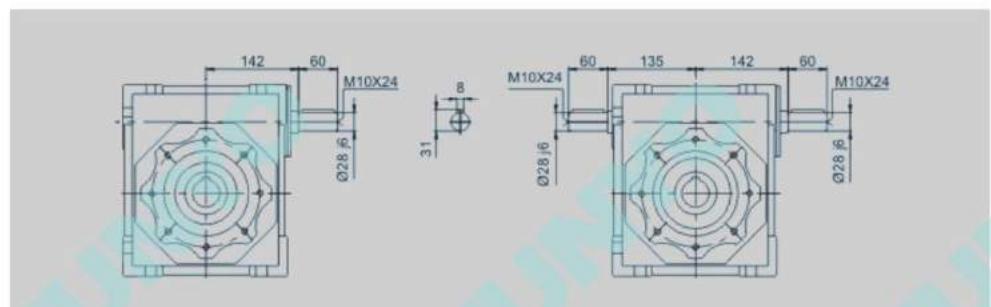


Weight : 13kg

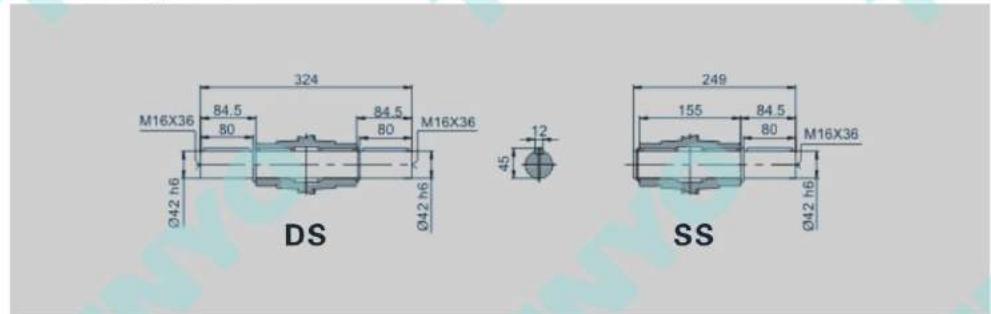
R系列 蝶輪減速機  
R Series RV Gear Motor

NRV  
110  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
減速比1:5~100

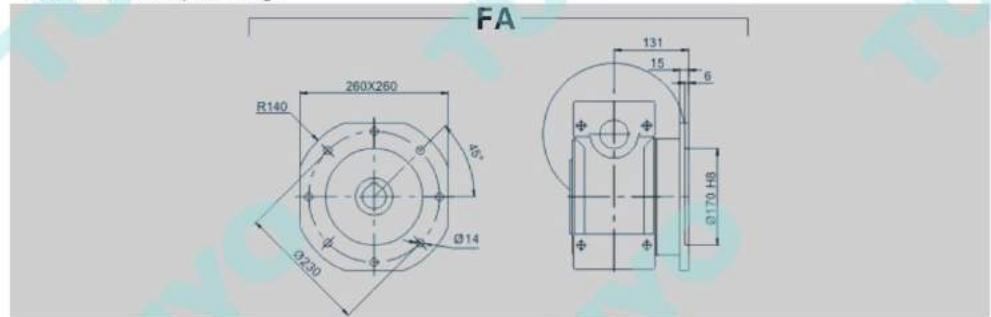
外形尺寸 Dimension



◆ 输出轴 Output shaft



◆ 输出法兰 Output flange

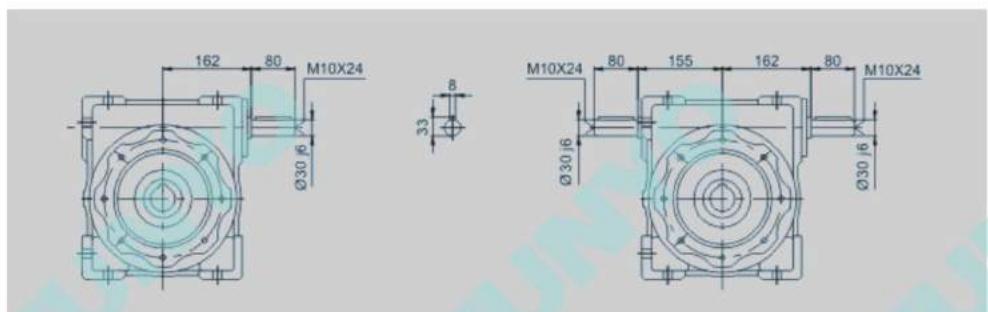


Weight : 40kg

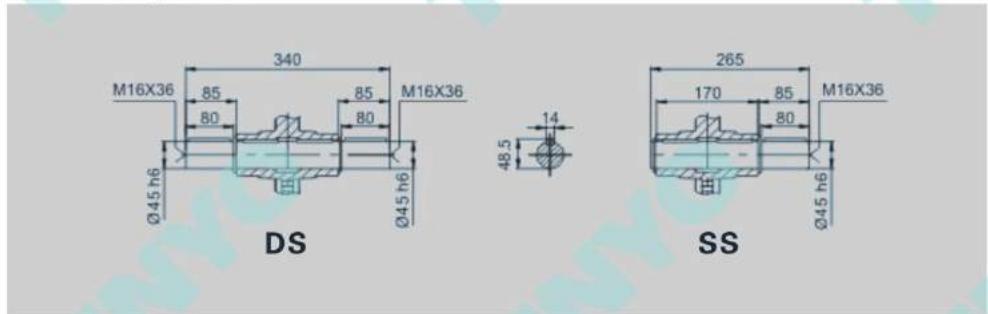
R系列 蝶輪減速機  
R Series RV Gear Motor



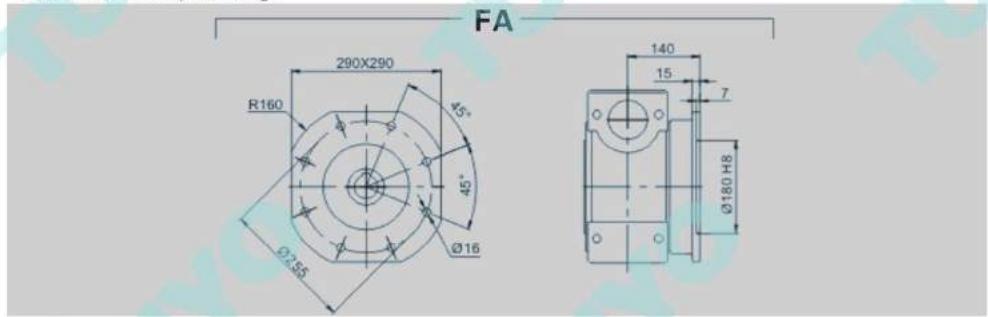
外形尺寸 Dimension



◆ 輸出軸 Output shaft



◆ 輸出法蘭 Output flange



Weight : 50kg

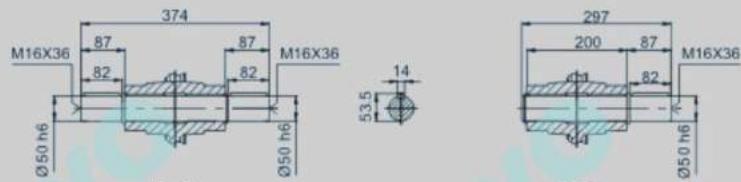
R系列 蝶輪減速機  
R Series RV Gear Motor

**NRV 150**  
單級蝶輪減速機  
Single stage worm reducer  
軸輸入  
減速比 1:5 ~ 100

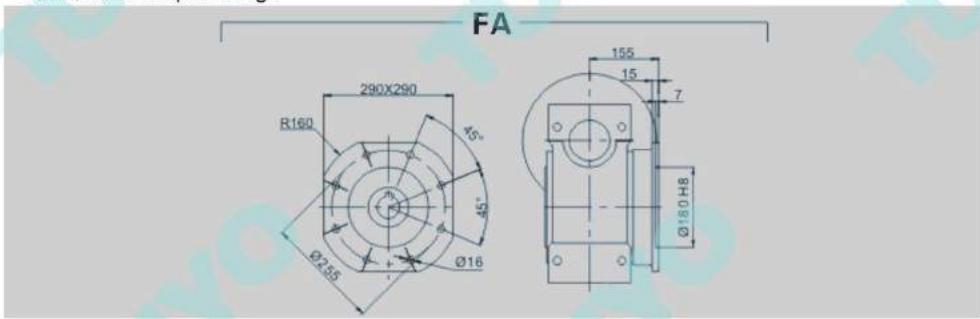
外形尺寸 Dimension



◆ 輸出軸 Output shaft



◆ 輸出法蘭 Output flange

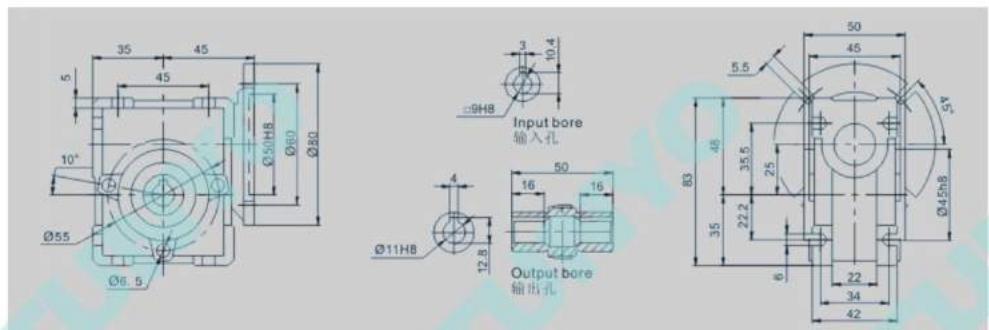


Weight : 84kg

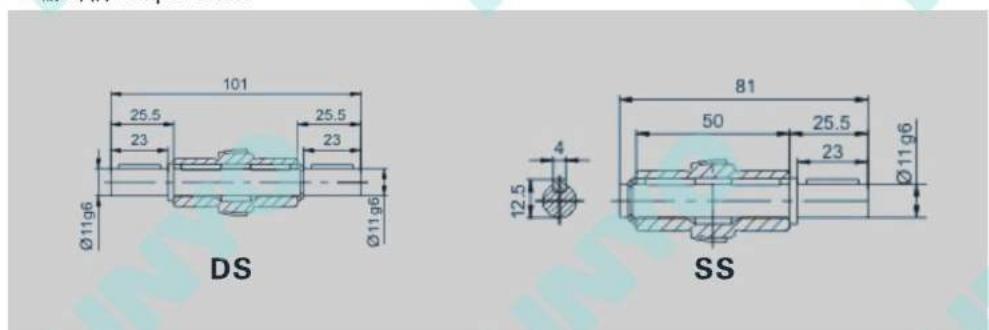
R系列 蝶輪減速機  
R Series RV Gear Motor

**NMRV 025**  
單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~60

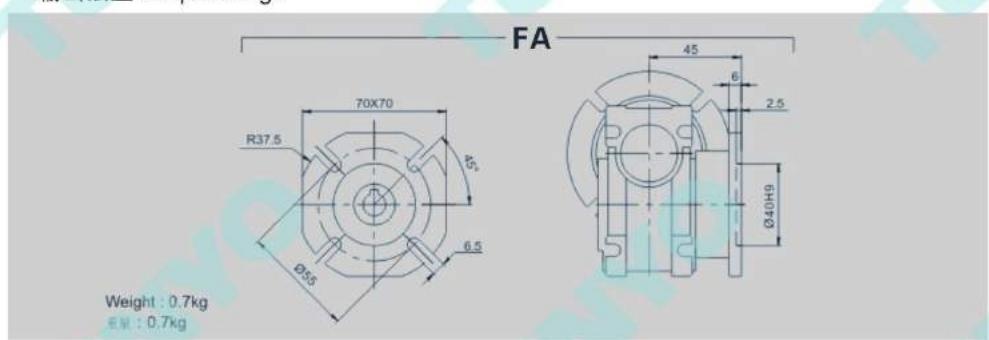
外形尺寸 Dimension



◆ 输出轴 Output shaft



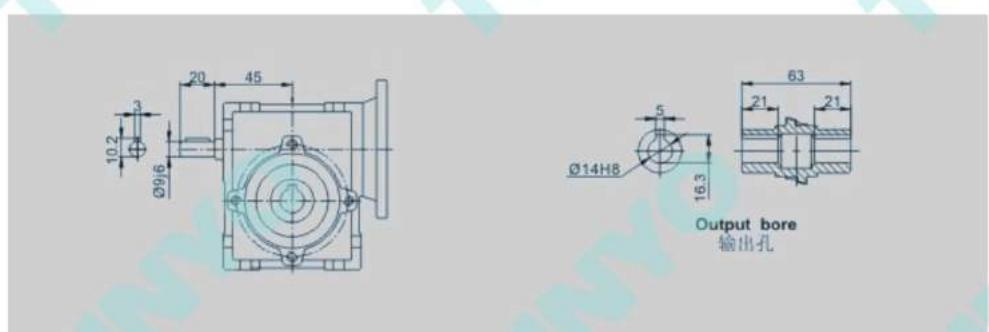
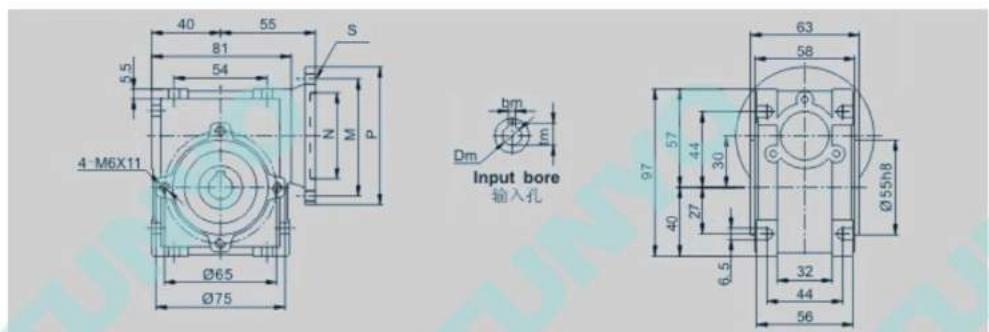
◆ 输出法兰 Output flange



R系列 蝶輪減速機  
R Series RV Gear Motor

**NMRV  
030**  
單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~80

外形尺寸 Dimension



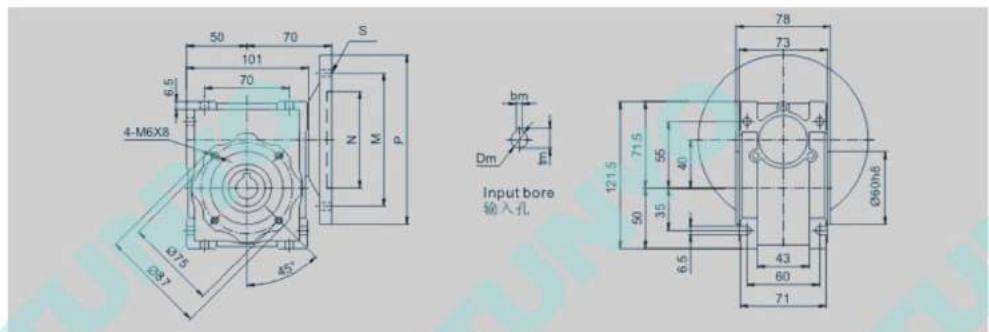
PAM-IEC 通用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
63B5	Ø95	Ø115	Ø140	4	12.8	Ø9	11	11	11	11	11	11	11	11	11	—	—	—	23
63B14	Ø60	Ø75	Ø90	4	12.8	Ø6	9	9	9	9	9	9	9	9	9	9	9	—	20
56B5	Ø80	Ø100	Ø120	3	10.4	Ø7	9	9	9	9	9	9	9	9	9	9	9	—	20
56B14	Ø50	Ø65	Ø80	3	10.4	Ø6	9	9	9	9	9	9	9	9	9	9	9	—	20

Weight: 1.3kg

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV  
040**  
單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~100

外形尺寸 Dimension



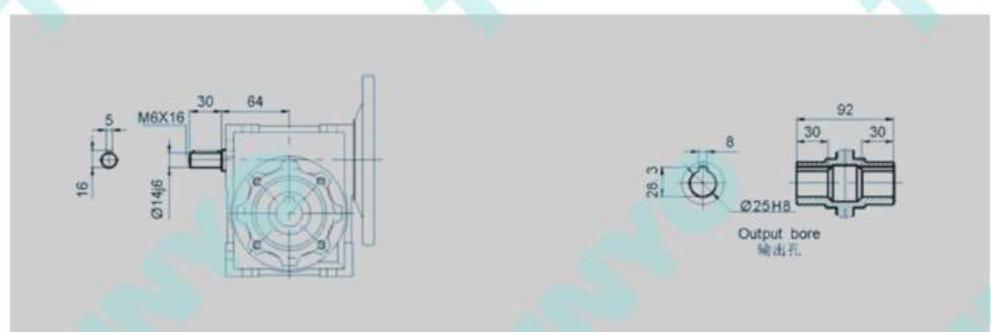
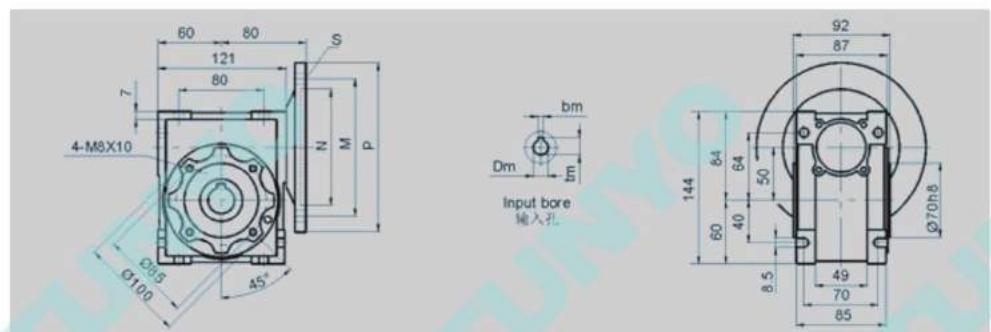
PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11	14	14	14	14	14	14	14	14	-	-	-	-	30
71B14	Ø70	Ø85	Ø105	5	16.3	Ø7	11	11	11	11	11	11	11	11	11	11	11	11	23
63B5	Ø95	Ø115	Ø140	4	12.8	Ø9	11	11	11	11	11	11	11	11	11	11	11	23	
63B14	Ø60	Ø75	Ø90	4	12.8	Ø6													
56B5	Ø80	Ø100	Ø120	3	10.4	Ø7	-	-	-	-	-	-	-	-	9	9	9	9	23

Weight : 2.4kg

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV  
050**  
單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~100

外形尺寸 Dimension



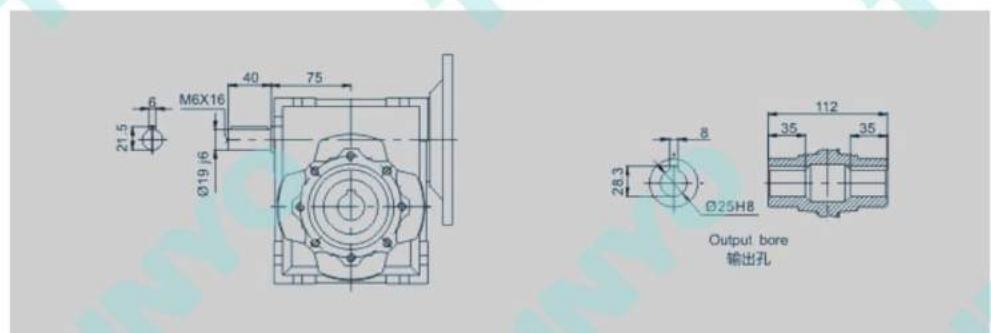
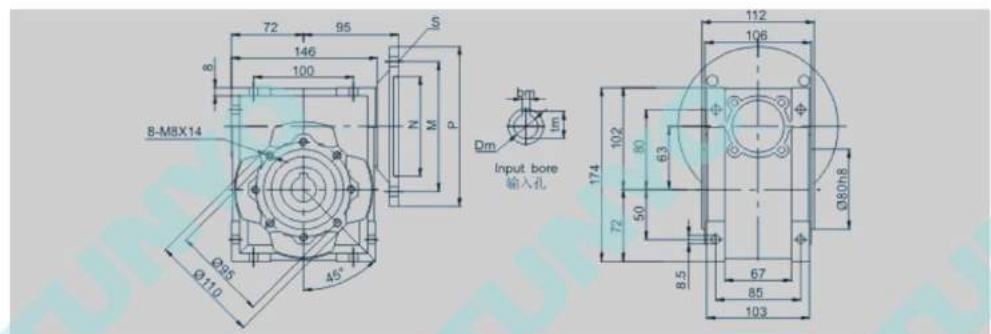
PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)										Depth 深	
							5	7.5	10	15	20	25	30	40	50	60	80	100
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	19	19	19	19	19	19	19					40
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7												
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11	14	14	14	14	14	14	14	14	14	14	14	30
71B14	Ø70	Ø85	Ø105	5	16.3	Ø7												
63B5	Ø95	Ø115	Ø140	4	12.8	Ø9								11	11	11	11	23
63B14	Ø60	Ø75	Ø90	4	12.8	Ø6								11	11	11	11	23

Weight : 3.6kg

R系列 蝶輪減速機  
R Series RV Gear Motor

**NMRV  
063**  
單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~100

外形尺寸 Dimension



PAM-IEC 適用電機	N (H8)	M	P	bm	tm	S	Dm (H7)												
							5	7.5	10	15	20	25	30	40	50	60	80	100	Depth 深
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	24	24	24	24	24	24	24						50
90B14	Ø95	Ø115	Ø140	8	27.3	Ø9													
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	19	19	19	19	19	19	19	19	19	19	19		40
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7													
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11								14	14	14	14	14	30
71B14	Ø70	Ø85	Ø105	5	16.3	Ø7													

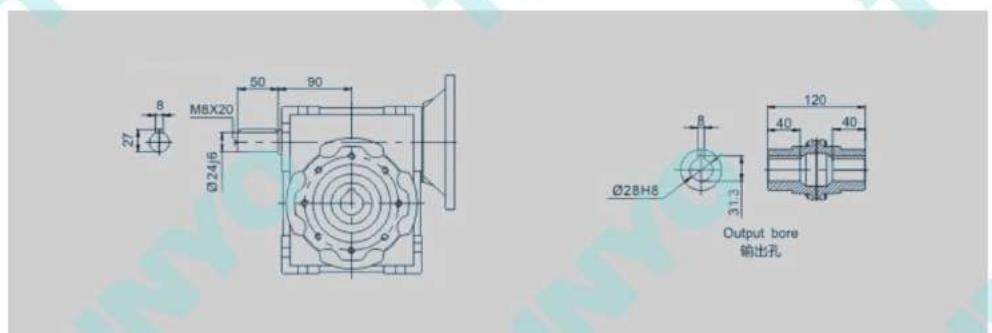
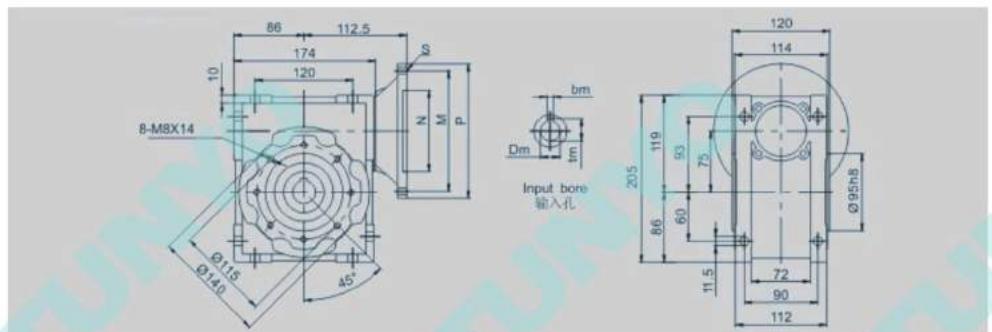
Weight : 6.3kg

R系列 蝶輪減速機  
R Series RV Gear Motor

NMRV  
075

單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~100

外形尺寸 Dimension



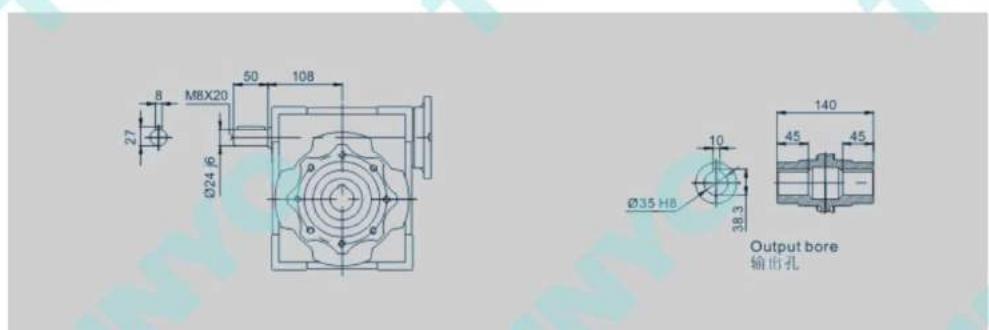
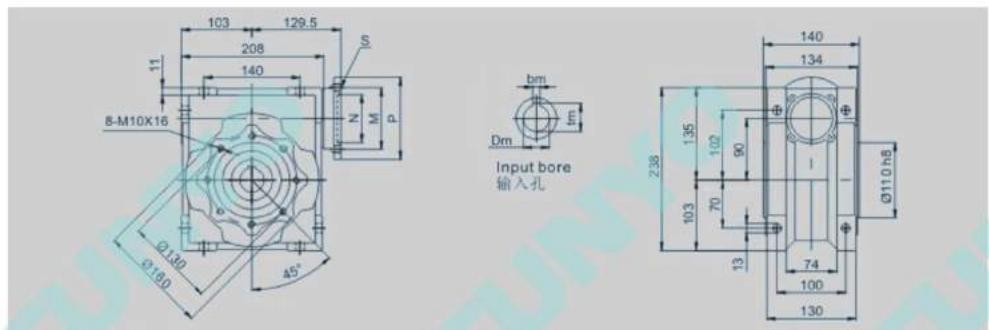
PAM-IEC 通用电机	N (H8)	M	P	bm	tm	S	Dm (H7)										Depth 深		
							5	7.5	10	15	20	25	30	40	50	60	80	100	
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	28	28	28	-	-	-	-	-	-	-	-	60
100/112B14	Ø110	Ø130	Ø160	8	31.3	Ø9	-	24	24	24	24	24	24	24	-	-	-	-	50
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	24	24	24	24	24	24	24	-	-	-	-	40
90B14	Ø95	Ø115	Ø140	8	27.3	Ø9	-	-	-	-	19	19	19	19	19	19	19	19	40
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	-	-	-	-	19	19	19	19	19	19	19	19	30
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7	-	-	-	-	-	-	-	-	14	14	14	14	30
71B5	Ø110	Ø130	Ø160	5	16.3	Ø11	-	-	-	-	-	-	-	-	-	-	-	-	30

Weight : 9kg

R系列 蝶輪減速機  
R Series RV Gear Motor

**NMRV 090**  
單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~100

外形尺寸 Dimension



PAM-IEC 通用电机	N (H8)	M	P	bm	tm	S	Dm (H7)										Depth 深	
							5	7.5	10	15	20	25	30	40	50	60	80	100
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	28	28	28	28	28	28	-	-	-	-	60
100/112B14	Ø110	Ø130	Ø160	8	31.3	Ø9	-	24	24	24	24	24	24	24	24	24	-	50
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	-	-	19	19	19	19	40
90B14	Ø95	Ø115	Ø140	8	27.3	Ø9	-	-	-	-	-	-	-	19	19	19	19	40
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	-	-	-	-	-	-	-	19	19	19	19	40
80B14	Ø80	Ø100	Ø120	6	21.8	Ø7	-	-	-	-	-	-	-	19	19	19	19	40

Weight : 13kg

R系列 蝶輪減速機  
R Series RV Gear Motor

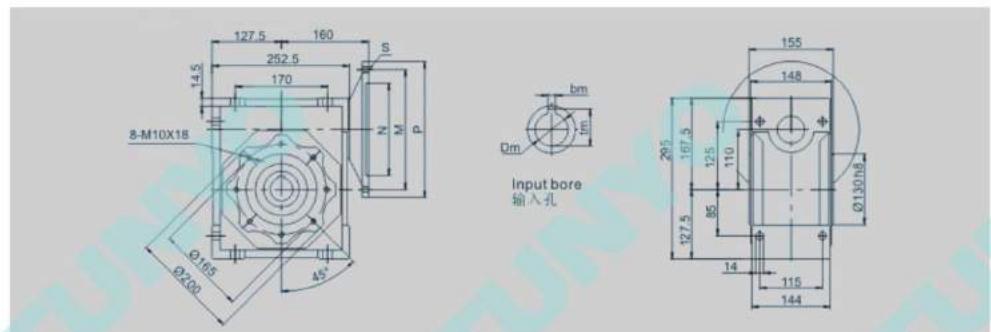
**NMRV**  
**110**

單級蝶輪減速機  
Single stage worm reducer

法蘭輸入  
Input by flange

減速比1:5~100

外形尺寸 Dimension



PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)											
							5	7.5	10	15	20	25	30	40	50	60	80	100
132B5	Ø230	Ø265	Ø300	10	41.3	Ø15	-	38*	38*	38*	38*	-	-	-	-	-	-	80
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	28	28	28	28	28	28	28	28	28	28	60
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	24	24	24	24	24	24	50
80B5	Ø130	Ø165	Ø200	6	21.8	Ø11	-	-	-	-	-	-	-	-	19	19	40	

Weight : 40kg

R系列 蝶輪減速機  
R Series RV Gear Motor

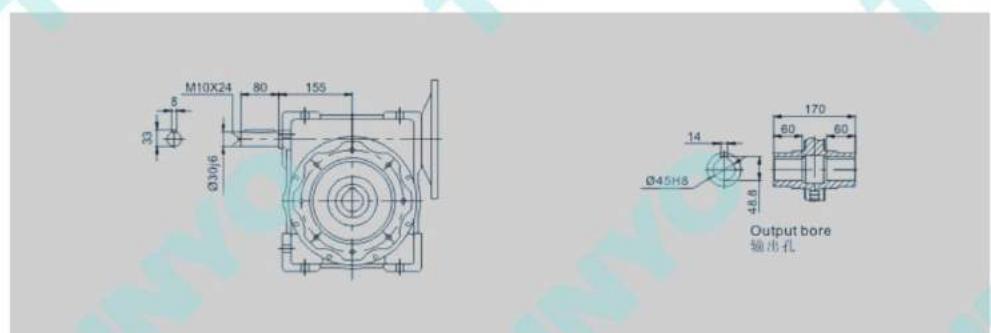
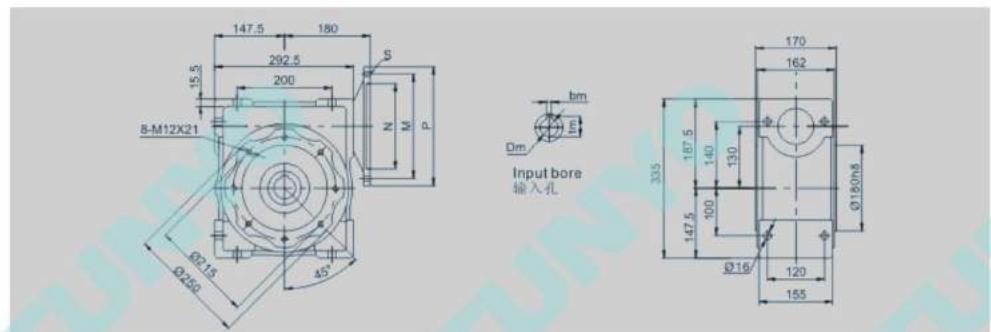
**NMRV**  
**130**

單級蝶輪減速機  
Single stage worm reducer

法蘭輸入  
Flange input

減速比1:5~100

外形尺寸 Dimension



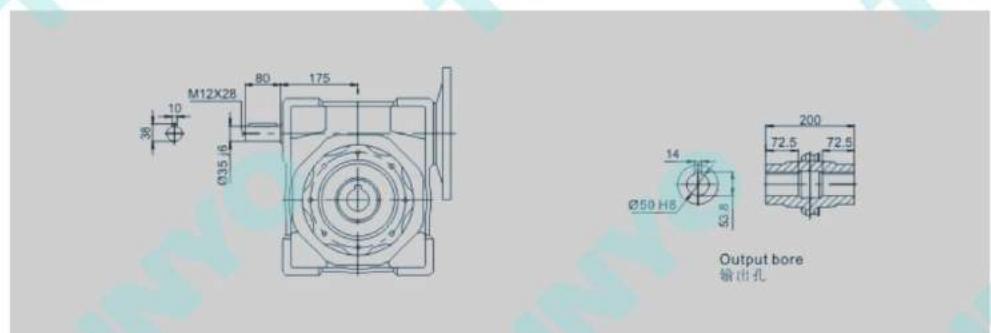
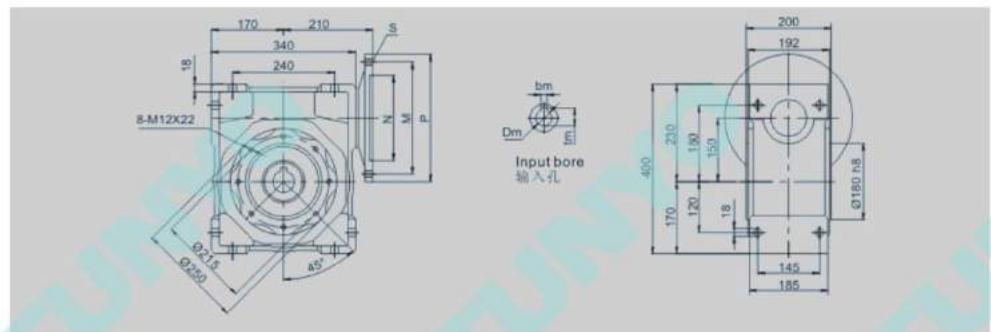
PAM-IEC 适用电机	N (H8)	M	P	bm	tm	S	Dm (H7)										Depth 深	
							5	7.5	10	15	20	25	30	40	50	60		
132B5	Ø230	Ø265	Ø300	10	41.3	Ø15	-	38*	38*	38*	38*	38*	38*	38*	-	-	-	80
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	-	-	-	-	28	28	28	28	28	28	60
90B5	Ø130	Ø165	Ø200	8	27.3	Ø11	-	-	-	-	-	-	-	-	-	24	24	50

Weight : 50kg

R系列 蝶輪減速機  
R Series RV Gear Motor

**NMRV**  
**150**  
單級蝶輪減速機  
Single stage worm reducer  
法蘭輸入  
減速比1:5~100

外形尺寸 Dimension

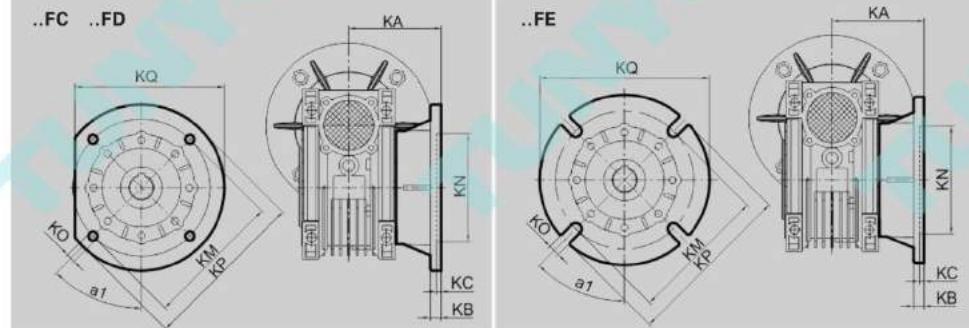
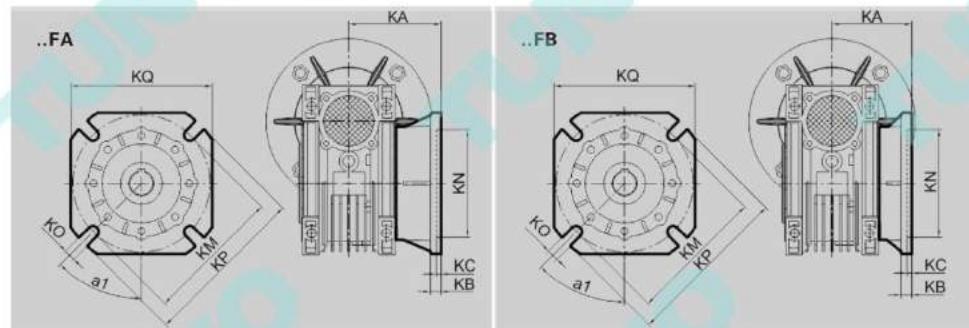


PAM-IEC 適用電機	N (H8)	M	P	bm	tm	S	Dm (H7)										Depth 深	
							5	7.5	10	15	20	25	30	40	50	60		
160B5	Ø250	Ø300	Ø350	12	45.3	Ø15	-	42	42	42	42	42	-	-	-	-	-	110
132B5	Ø230	Ø265	Ø300	10	41.3	Ø15	-	-	-	-	38	38	38	38	38	38	-	80
100/112B5	Ø180	Ø215	Ø250	8	31.3	Ø15	-	-	-	-	-	-	-	28	28	28	28	60

Weight : 84kg

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

NMRV連接尺寸圖表 Connecting dimension sheet



NMRV	FA								
	a1	KA	KB	KC	KM	KN <sub>ns</sub>	KO	KP	KQ
030	45°	54.5	6	4	68	50	6.5(n=4)	80	70
040	45°	67	7	4	75	60	9(n=4)	110	95
050	45°	90	9	5	85	70	11(n=4)	125	110
063	45°	82	10	6	150	115	11(n=4)	180	142
075	45°	111	13	6	165	130	14(n=4)	200	170
090	45°	111	13	6	175	152	14(n=4)	210	200
110	45°	139	15	6	230	170	14(n=8)	280	260
130	45°	140	15	6	255	180	16(n=8)	320	290
150	22.5°	155	15	6	255	180	16(n=8)	320	290

NMRV	FB								
	a1	KA	KB	KC	KM	KN <sub>ns</sub>	KO	KP	KQ
030	-	-	-	-	-	-	-	-	-
040	45°	97	7	4	75	60	9(n=4)	110	95
050	45°	120	9	5	85	70	11(n=4)	125	110
063	45°	112	10	6	150	115	11(n=4)	180	142
075	45°	90	13	6	130	110	11(n=4)	160	-
090	45°	122	18	6	215	180	14(n=4)	250	-
110	-	-	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-	-

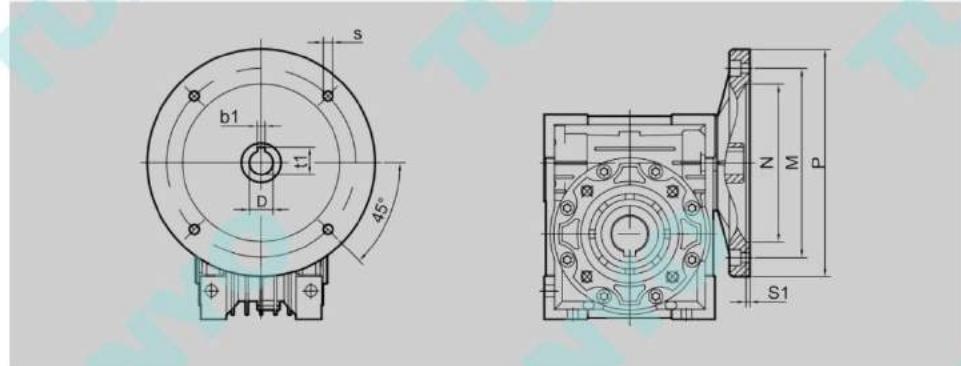
NMRV	FD								
	a1	KA	KB	KC	KM	KN <sub>ns</sub>	KO	KP	KQ
040	45°	58	12	5	100	80	9(n=4)	120	-
050	45°	72	14.5	5	115	95	11(n=4)	140	-
063	45°	107	10	5	165	130	11(n=4)	200	-
090	45°	151	13	6	175	152	14(n=4)	210	-

NMRV	FE								
	a1	KA	KB	KC	KM	KN <sub>ns</sub>	KO	KP	KQ
040	-	-	-	-	-	-	-	-	-
050	-	-	-	-	-	-	-	-	-
063	45°	80.5	16.5	5	130	110	11(n=4)	160	-
090	-	-	-	-	-	-	-	-	-

R系列蝸輪減速機  
R Series RV Gear Motor

NMRV連接尺寸圖表 Connecting dimension sheet

◆ NMRV..IEC輸入法蘭尺寸 Input flange dimension

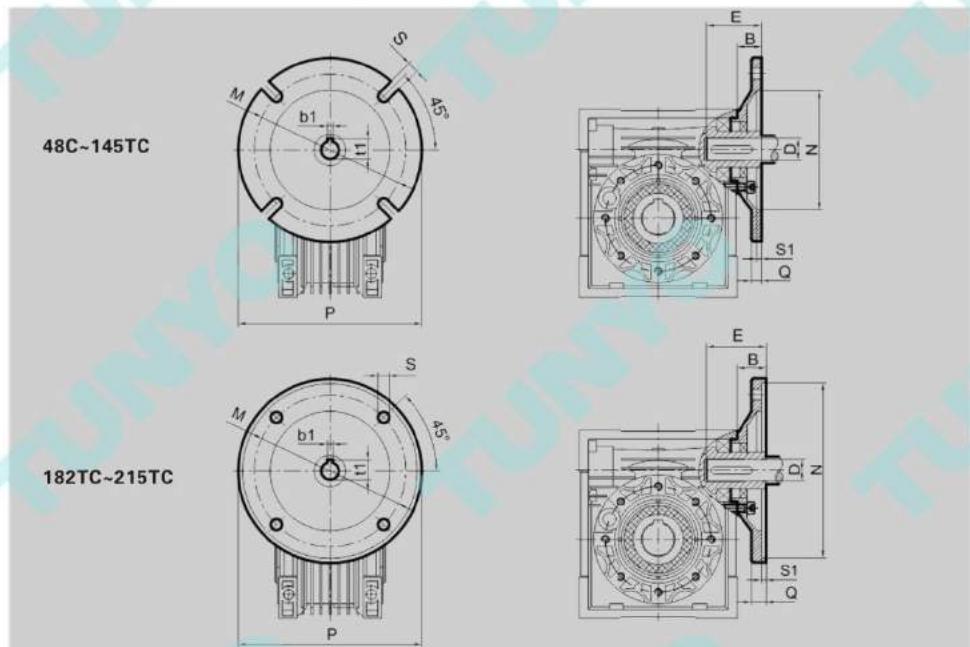


NMRV	PAM IEC	N		M		P		S		b1	t1	s1	齒速比/ratio)											
		BS	B14	BS	B14	BS	B14	BS	B14				5	7.5	10	15	20	25	30	40	50	60	80	100
025	56B14	—	50	—	65	—	80	—	6	3	10.4	4	9	9	9	9	9	9	9	9	9	9	—	—
	5685/B14	80	50	100	65	120	80	65	5.5	3	10.4	4	9	9	9	9	9	9	9	9	9	9	9	—
030	63B5/B14	95	60	115	75	140	90	9	5.5	4	12.8	4	11	11	11	11	11	11	11	11	11	11	—	—
	5685/B14	80	50	100	65	120	80	65	5.5	3	10.4	4	—	—	—	—	—	—	—	—	9	9	9	9
040	63B5/B14	95	60	115	75	140	90	9	5.5	4	12.8	4	11	11	11	11	11	11	11	11	11	11	11	11
	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	14	14	14	14	14	14	14	14	—	—	—	—
050	63B5/B14	95	60	115	75	140	90	9	5.5	4	12.8	5	—	—	—	—	—	—	—	—	11	11	11	11
	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	14	14	14	14	14	14	14	14	14	14	14	14
063	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	19	19	19	19	19	19	19	19	19	19	19	19
	71B5/B14	110	70	130	85	160	105	9	7	5	16.3	5	—	—	—	—	—	—	—	14	14	14	14	14
075	80B5/B14	130	80	165	100	200	120	11	7	6	21.8	5	14	14	14	14	14	14	14	14	14	14	14	14
	71B5/B14	110	—	130	—	160	—	9	7	5	16.3	5	—	—	—	—	—	—	—	14	14	14	14	14
090	90B5/B14	130	95	165	115	200	140	11	9	8	27.3	5	—	24	24	24	24	24	24	—	—	—	—	—
	100B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	—	28	28	28	28	28	28	—	—	—	—	—
110	112B5/B14	180	110	215	130	250	160	13	9	8	31.3	5.5	—	28	28	28	28	28	28	—	—	—	—	—
	80B5	130	—	165	—	200	—	11	7	6	21.8	6	—	—	—	—	—	—	—	—	—	19	19	19
130	90B5	130	—	165	—	200	—	11	9	8	27.3	6	—	—	—	—	—	—	—	24	24	24	24	24
	100B5	180	—	215	—	250	—	13	9	8	27.3	6	—	28	28	28	28	28	28	—	—	—	—	—
150	112B5	180	—	215	—	250	—	13	9	8	31.3	6	—	28	28	28	28	28	28	—	—	—	—	—
	132B5	230	—	265	—	300	—	13	—	10	41.3	6	—	38	38	38	38	38	38	—	—	—	—	—
150	100/112B5	180	—	215	—	250	—	13	9	8	31.3	6	—	—	—	—	—	—	—	—	28	28	28	28
	132B5	230	—	265	—	300	—	13	—	10	41.3	6	—	—	—	—	38	38	38	38	38	38	38	38
	160B5	250	—	300	—	350	—	19	—	12	45.3	6	—	42	42	42	42	42	42	—	—	—	—	—

**R系列 蜗輪減速機**  
R Series RV Gear Motor

**NMRV連接尺寸圖表 Connecting dimension sheet**

◆ NMRV..NEMA輸入法蘭尺寸 Input flange dimension

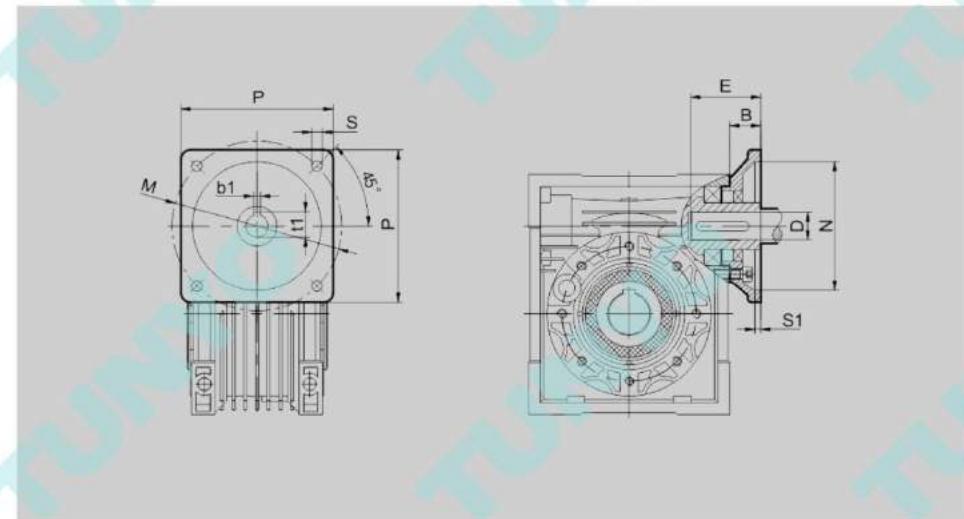


NMRV	NEMA Flange	B	D	E	b1	t1	M	N	P	Q	S	S1
030	48C	1.03	0.500	1.66	0.130	0.560	3.750	3.0	5.7	0.433	0.320	0.177
040	56C	1.15	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
050	56C	1.15	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
	56C	1.22	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
063	143TC 145TC	1.22	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	56C	1.50	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
075 090	143TC	1.50	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	145TC	1.50	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	182TC	1.50	1.125	2.62	0.250	1.240	7.250	8.5	9.0	0.472	0.551	0.197
	184TC	1.50	1.125	2.62	0.250	1.240	7.250	8.5	9.0	0.472	0.551	0.197
110 130	56C	1.89	0.625	2.06	0.188	0.713	5.875	4.5	6.5	0.433	0.413	0.177
	143TC	1.89	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	145TC	1.89	0.875	2.12	0.188	0.963	5.875	4.5	6.5	0.433	0.413	0.177
	182TC	1.89	1.125	2.62	0.250	1.240	7.250	8.5	9.0	0.472	0.551	0.197
150	184TC	1.89	1.375	3.12	0.312	1.517	7.250	8.5	9.0	0.472	0.551	0.197
	213TC	1.89	1.375	3.12	0.312	1.517	7.250	8.5	9.0	0.472	0.551	0.197
	215TC	1.89	1.375	3.12	0.312	1.517	7.250	8.5	9.0	0.472	0.551	0.197
	182TC	1.33	1.125	2.62	0.250	1.240	7.250	8.5	9.0	0.472	0.551	0.197
150	184TC	1.33	1.125	2.62	0.250	1.240	7.250	8.5	9.0	0.472	0.551	0.197
	213TC	1.33	1.375	3.12	0.312	1.517	7.250	8.5	9.0	0.472	0.551	0.197
	215TC	1.33	1.375	3.12	0.312	1.517	7.250	8.5	9.0	0.472	0.551	0.197

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**NMRV連接尺寸圖表 Connecting dimension sheet**

◆ NMRV..SM伺服电机输入法兰尺寸 Servo motor input flange dimension

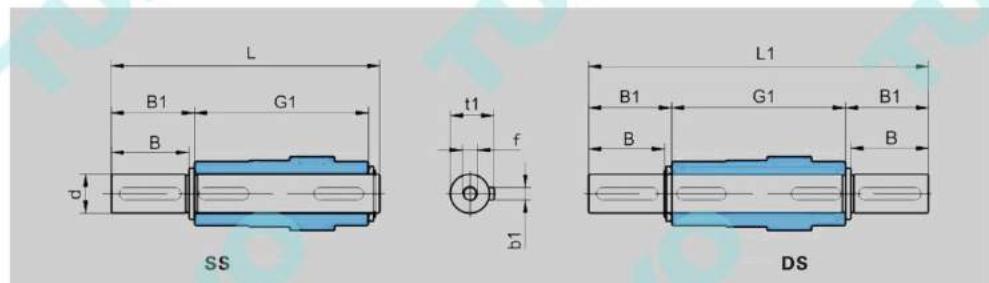


NMRV	P	B	D <sub>in</sub>	E	b1	t1	M	N	S	S1
040	60	35	14	30	5	16.3	70	50	5.5	4
	60	35	14	30	5	16.3	70	50	5.5	4
050	80	28	19	35	6	21.8	90	70	6	5
	90	30	16	35	5	18.3	100	80	6.5	5
	110	26	19	55	6	21.8	130	95	9	6
	130	32	22	57	6	24.8	145	110	9	6
	60	40	14	30	5	16.3	70	50	5.5	4
	80	21	19	35	6	21.8	90	70	6	5
063	90	21	16	35	5	18.3	100	80	6.5	5
	110	46	19	55	6	21.8	130	95	9	6
	130	40	22	57	6	24.8	145	110	9	6
	110	47	19	55	6	21.8	130	95	9	6
	130	40	22	57	6	24.8	145	110	9	6
075	150	38	28	58	8	31.3	165	130	11	6
	110	47	19	55	6	21.8	130	95	9	6
	130	40	22	57	6	24.8	145	110	9	6
090	130	40	22	57	6	24.8	145	110	9	6
	150	38	28	58	8	31.3	165	130	11	6
	130	38	22	57	6	24.8	145	110	9	6
110	150	38	28	58	8	31.3	165	130	11	6
	180	38	35	65	10	38.3	200	114.3	13.5	6
	130	38	22	57	6	24.8	145	110	9	6
130	150	38	28	58	8	31.3	165	130	11	6
	180	38	35	65	10	38.3	200	114.3	13.5	6
	130	38	22	57	6	24.8	145	110	9	6
150	150	38	28	58	8	31.3	165	130	11	6
	180	38	35	65	10	38.3	200	114.3	13.5	6

**R系列 蝶輪減速機**  
R Series RV Gear Motor

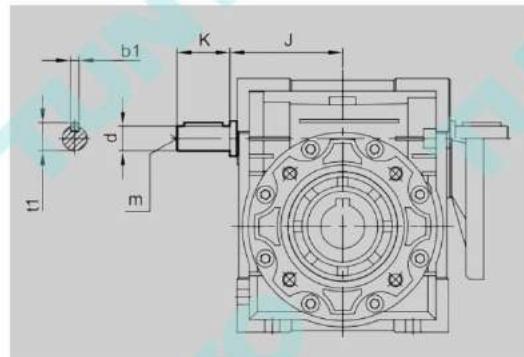
附件尺寸圖表 Accessories outline dimension sheet

◆ 输出轴 Output shafts



NMRV	dh6	B	B1	G1	L	L1	f	b1	I1
025	11	23	25.5	50	81	101	-	4	12.5
030	14	30	32.5	63	102	128	M6*17	5	16
040	18	40	43	78	128	164	M6*17	6	20.5
050	25	50	53.5	92	153	199	M10*27	8	28
063	25	50	53.5	112	173	219	M10*27	8	28
075	28	60	63.5	120	192	247	M10*27	8	31
090	35	80	84.5	140	234	309	M12*34	10	38
110	42	80	84.5	155	249	324	M16*42	12	45
130	45	80	85	170	265	340	M16*42	14	48.5
150	50	82	87	200	297	374	M16*42	14	53.5

◆ 蜗杆尾出軸(E) Extension worm shaft(E)

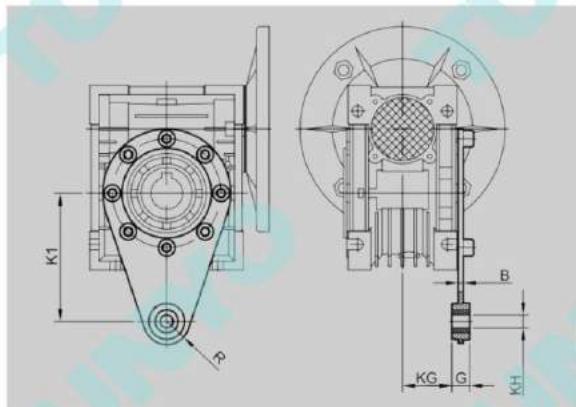


NMRV	J	d(j6)	K	m	b1	t1
025	37	9	20	-	3	10.2
030	45	9	20	-	3	10.2
040	53	11	23	-	4	12.5
050	64	14	30	M6	5	16
063	75	19	40	M6	6	21.5
075	90	24	50	M8	8	27
090	108	24	50	M8	8	27
110	135	28	60	M10	8	31
130	155	30	80	M10	8	33
150	175	35	80	M12	10	38

**R系列 蝶輪減速機**  
R Series RV Gear Motor

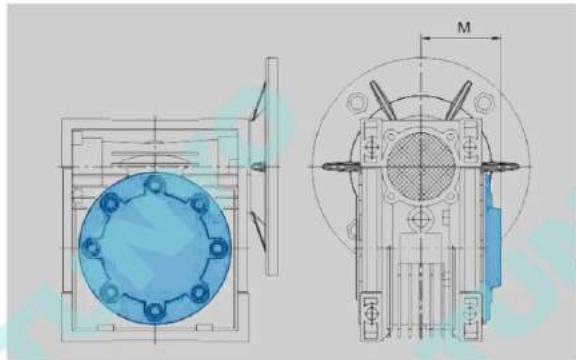
**附件尺寸圖表 Accessories outline dimension sheet**

◆ 扭力臂 Torque arm



NMRV	K1	G	KG	KH	R	B
025	70	14	17.5	8	15	4
030	85	14	24	8	15	4
040	100	14	31.5	10	18	4
050	100	14	38.5	10	18	4
063	150	14	49	10	18	6
075	200	25	47.5	20	30	6
090	200	25	57.5	20	30	6
110	250	30	62	25	35	6
130	250	30	69	25	35	6
150	250	30	84	25	35	8

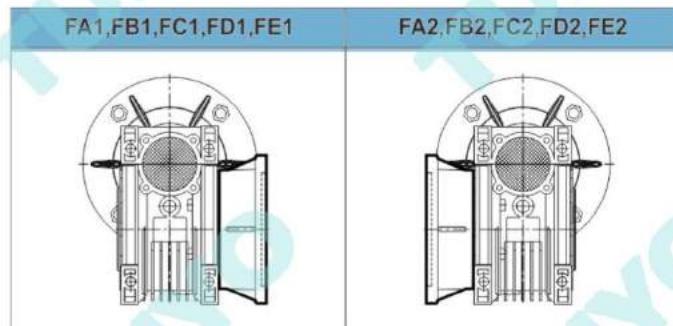
◆ 防尘盖 Cover



NMRV	M
030	42
040	50
050	58
063	69
075	74
090	85
110	94
130	102
150	117

安裝方位圖 Installation positions diagram

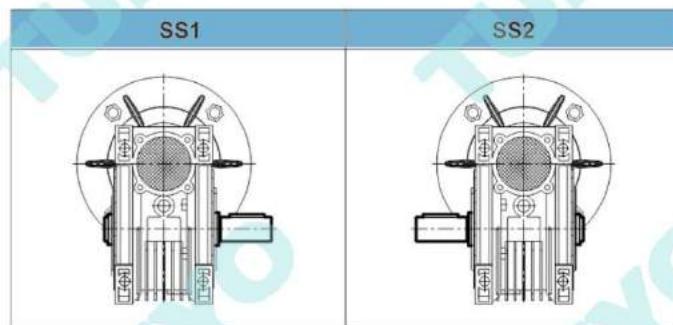
◆ 输出法兰位置 Position diagram for output flange



如果没有特殊要求，一般按出厂标准位置如图F.1方式和B3位置提供。

Unless specified otherwise, the gear units is supplied with the flange in pos. F.1 referred to position B3.

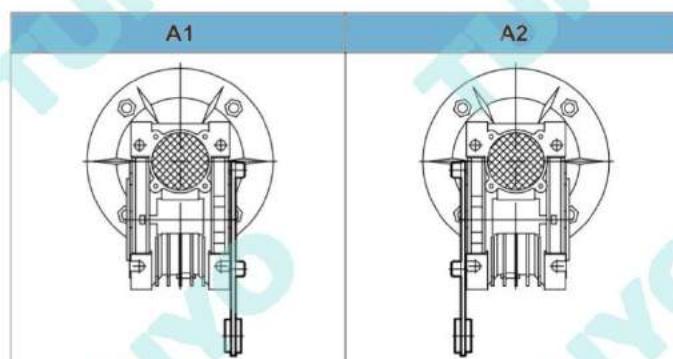
◆ 单向输出轴位置 Position diagram for single output shaft



如果没有特殊要求，一般按出厂标准位置如图SS1方式和B3位置提供。

Unless specified otherwise, the gear units is supplied with the flange in pos. SS1 referred to position B3.

◆ 扭力臂(A)位置 Torque arm(A)position



如果没有特殊要求，一般按出厂标准位置如图A1方式和B3位置提供。

Unless specified otherwise, the gear units is supplied with the flange in pos. A1 referred to position B3.

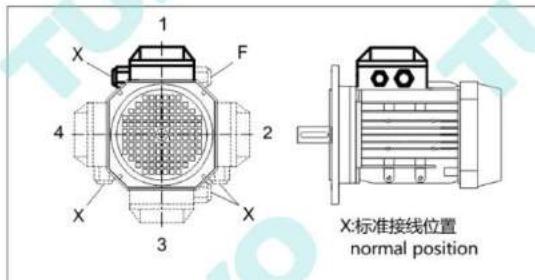
**R系列 蝶輪減速機**  
R Series RV Gear Motor

**安裝方位圖 Installation positions diagram**

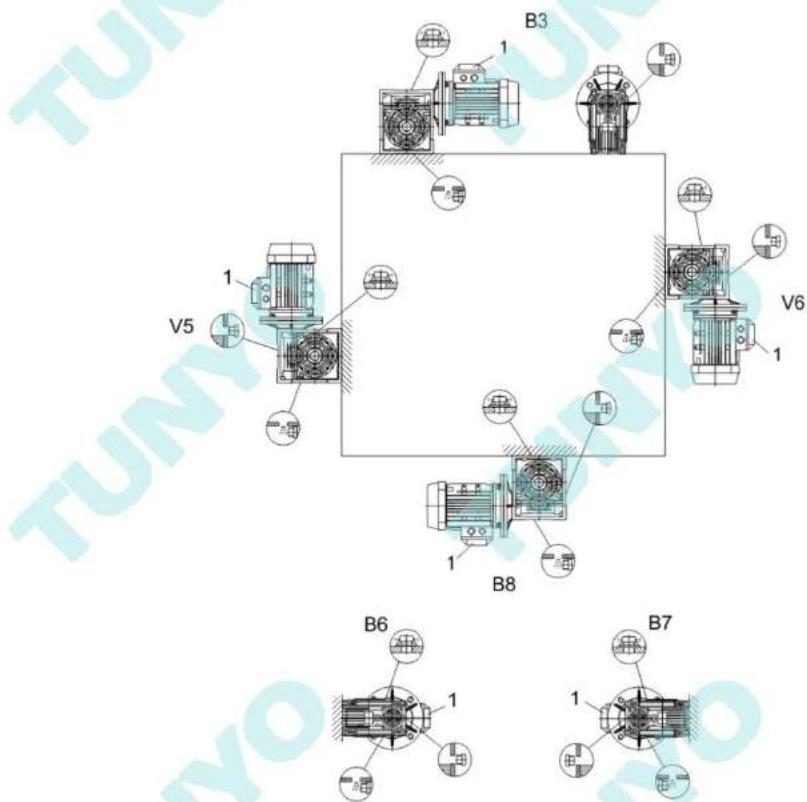
◆ 符号释意 Symbols used

符号/Symbol	含义/Meaning
	排气阀 Breather valve
	油位塞 Oil level plug
	放油塞 Oil drain plug

◆ 电机接线盒方位 Position of motor terminal box



◆ NMRV.. 安裝方位 Mounting positions



R系列 蝶輪減速機  
R Series RV Gear Motor



型號說明 General Information

**DRV**

减速機系列代號  
DRV:雙級減速

**025/030**

機座號  
025/030  
t  
063/150

**100**

減速比  
1:100~5000

**80M**

輸入法蘭代號

**AS1**

安裝方位  
AS1 VS1  
AS2 VS2  
BS1 PS1  
BS2 PS2

**SS**

其他  
SS:單軸輸出  
DS:雙軸輸出  
TA:扭力臂  
C:防塵蓋  
FA/FB/FC/FD:  
輸出法蘭  
E:蝶杆尾出軸

R系列 蝶輪減速機  
R Series RV Gear Motor

DRV減速機型式 DRV deceleration type



NMRV减速机本身可以组合成一个双级联体减速机 ( DRV ) 。DRV的传动比即为第一级NMRV和第二级NMRV传动比的乘积，可将传动比拓展至 $i=100-5000$ 的范围。

DRV并不是两个NMRV的简单组合，合理的组合应使两个减速机达到一致的工况。因此第二级减速机的机座规格要大于第一级减速机的机座规格。

NMRV reducers can be combined as a double reducers combination (DRV). The ratio of DRV is just the product of the first stage NMRV's ratio. So the ratio can be extended to  $i=100-5000$ .

DRV is not only simply combination of two NMRV reducers, the reasonably combinations should make two reducers operating at same condition, therefore the frame size of the second stage reducer should be bigger than the first stage reducer.

**R系列蝸輪減速機**  
R Series RV Gear Motor

**DRV減速機選型表 Gear unit selection tables**

◆ DRV减速机组合表 DRV Possible unit selection tables

NMRV+NMRV	i=i1*i2	100	150	200	250	300	400	500	600	750	900
	n2	14	9.3	7	5.6	4.7	3.5	2.8	2.3	1.9	1.6
DRV025/030	0.06kW		10*15	10*20	10*25	10*30	20*20	20*25	20*30	30*25	30*30
	0.09kW	10*10									
DRV025/040	0.06kW					10*30	10*40	20*25	20*30	30*25	30*30
DRV030/040	0.06kW					10*30	10*40	20*25	20*30	25*30	30*30
	0.09kW					10*30					
DRV030/050	0.06kW										30*30
	0.09kW						10*40	10*50	20*30	25*30	30*30
	0.12kW					10*30	10*40	10*50			
	0.18kW					10*30					
DRV030/063	0.06kW										
	0.09kW										15*60
	0.12kW							10*50	15*40	15*50	
	0.18kW					7.5*40	10*40	10*50			
DRV040/075	0.06kW										
	0.09kW										30*30
	0.12kW								20*30	25*30	30*30
	0.18kW					10*30	10*40	10*50			
	0.25kW										
	0.37kW					10*30	10*40				
DRV040/090	0.06kW										
	0.09kW										
	0.12kW										15*60
	0.18kW								15*40	15*50	15*60
	0.25kW										
	0.37kW					7.5*40	10*40	10*50	15*40		
DRV050/110	0.12kW										
	0.18kW										
	0.25kW										
	0.37kW									25*30	30*30
	0.55kW					10*30	10*40	10*50	15*40	25*30	
	0.75kW					10*30	10*40				
DRV063/130	0.25kW										
	0.37kW										
	0.55kW							10*50		25*30	
	0.75kW							10*50	15*40	25*30	30*30
	1.1kW					10*30	10*40	10*50			
	1.5kW					10*30	10*40				
DRV063/150	0.25kW										
	0.37kW										
	0.55kW										
	0.75kW								10*50	15*40	25*30
	1.1kW		10*15	10*20	10*25	10*30	10*40	10*50	15*40	25*30	
	1.5kW		10*15	10*20	10*25	10*30	10*40	10*50	15*40		

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**DRV減速機選型表 Gear unit selection tables**

◆ DRV减速机组合表 DRV Possible unit selection tables

		i=i1*i2	1200	1500	1800	2400	3000	3200	4000	4800	5000
NMRV+NMRV	n2	1.2	0.93	0.78	0.58	0.47	0.44	0.35	0.29	0.28	
DRV025/030	0.06kW	40*30	50*30	60*30	60*40	60*50					
	0.09kW										
DRV025/040	0.06kW	40*30	50*30	60*30	60*40	60*50		50*80		50*100	
DRV030/040	0.06kW	30*40	50*30	60*30	60*40	60*50	80*40	80*50		50*100	
	0.09kW										
DRV030/050	0.06kW	30*40	50*30	60*30	60*40	60*50		80*50	80*60		
	0.09kW										
	0.12kW										
	0.18kW										
DRV030/063	0.06kW		30*50	30*60	60*40	60*50		80*50		50*100	
	0.09kW	30*40	30*50								
	0.12kW										
	0.18kW										
DRV040/075	0.06kW				60*40	60*50		80*50		100*50	
	0.09kW		50*30	60*30	60*40						
	0.12kW	30*40									
	0.18kW										
	0.25kW										
	0.37kW										
DRV040/090	0.06kW					60*50		80*50		100*50	
	0.09kW				60*40	60*50		80*50			
	0.12kW		30*50	30*60	60*40						
	0.18kW	30*40	30*50								
	0.25kW										
	0.37kW										
DRV050/110	0.12kW					60*50		80*50		100*50	
	0.18kW			60*30	60*40						
	0.25kW	30*40	50*30	60*30							
	0.37kW	30*40									
	0.55kW										
	0.75kW										
DRV063/130	0.25kW				60*40	60*50		80*50		100*50	
	0.37kW	30*40	50*30	60*30							
	0.55kW	30*40									
	0.75kW										
	1.1kW										
	1.5kW										
DRV063/150	0.25kW			60*30	60*40	60*50		80*50		100*50	
	0.37kW			60*30	60*40	60*50					
	0.55kW			60*30	60*40						
	0.75kW	30*40									
	1.1kW										
	1.5kW										

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

**DRV性能參數 Performance parameter**

P <sub>zr</sub> (kW)	n <sub>r</sub> (r/min)	i	M <sub>zr</sub> (Nm)	F <sub>zr</sub> (N)	f <sub>s</sub>			
0.06	14.0	100	25	1620	1.3		DRV025/030	5614
	9.3	150	33	1830	0.9			
	7.0	200	41	1830	0.7			
	5.6	250	45	1830	0.8			
	4.7	300	56	3490	1.2			
	3.5	400	69	3490	0.9			
	2.8	500	94	3490	0.7			
	2.3	600	100	3490	0.6			
	1.9	750	115	3490	0.5			
	1.6	900	125	3490	0.5			
	1.2	1200	153	3490	0.4			
	0.9	1500	185	3490	0.3			
	0.8	1800	198	3490	0.3			
	0.6	2400	247	3490	0.2			
	0.5	3000	280	3490	0.2			
0.06	0.4	4000	295	3490	0.1		DRV025/040	5614
	0.3	5000	348	3490	0.1			
	4.7	300	55	3490	1.3			
	3.5	400	67	3490	0.9			
	2.8	500	88	3490	0.6			
	2.3	600	95	3490	0.7			
	1.9	750	103	3490	0.6			
	1.6	900	118	3490	0.5			
	1.2	1200	143	3490	0.4			
	0.9	1500	166	3490	0.4			
	0.8	1800	184	3490	0.3			
	0.6	2400	217	3490	0.2			
	0.4	3200	247	3490	0.2			
	0.3	4000	278	3490	0.1			
	0.3	5000	327	3490	0.1			
0.1	1.6	900	118	4840	1.0		DRV030/040	5614
	1.2	1200	143	4840	0.7			
	0.9	1500	166	4840	0.7			
	0.8	1800	184	4840	0.7			
	0.6	2400	227	4840	0.5			
	0.5	3000	256	4840	0.4			
	0.4	4000	278	4840	0.3			
	0.3	4800	316	4840	0.3			

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

**DRV性能參數 Performance parameter**

$P_{z_1}$ (kW)	$n_z$ (r/min)	i	$M_{z_1}$ (Nm)	$F_{z_1}$ (N)	f <sub>s</sub>		
0.06	0.9	1500	173	6270	1.1		5614
	0.8	1800	191	6270	0.9		
	0.6	2400	227	6270	0.8		
	0.5	3000	256	6270	0.7		
	0.4	4000	295	6270	0.6		
	0.3	5000	327	6270	0.4		
	0.6	2400	267	7380	1.1		5614
	0.5	3000	305	7380	0.8		
	0.4	4000	360	7380	0.7		
	0.3	5000	409	7380	0.5		
0.09	0.5	3000	329	8180	1.4		5614
	0.4	4000	393	8180	1.3		
	0.3	5000	430	8180	1.0		
	28.0	100	18	1286	1.6		5612
	18.7	150	25	1472	1.1		
	14.0	200	31	1620	0.9		
	14.0	100	37	1620	0.8		
	9.3	150	50	1830	0.6		
	7.0	200	61	1830	0.5		
	5.6	250	68	1830	0.5		
	4.7	300	77	1830	0.4		
	3.5	400	106	1830	0.3		
	2.8	500	117	1830	0.3		
0.18	2.3	600	135	1830	0.2		5624
	1.9	750	149	1830	0.2		
	1.6	900	167	1830	0.2		
	1.2	1200	201	1830	0.1		
	0.9	1500	231	1830	0.1		
	0.8	1800	264	1830	0.1		
	0.6	2400	311	1830	0.1		
	0.5	3000	347	1830	0.1		
	9.3	300	43	3490	1.6		5612
	7.0	400	52	3490	1.2		
	5.6	500	71	3490	0.8		
	4.7	600	82	3490	0.8		
	3.5	750	103	4840	1.2		
0.22	2.8	800	120	4840	1.0		5624
	2.3	900	146	4840	0.9		
	1.9	1200	158	4840	0.8		

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

**DRV性能參數 Performance parameter**

$P_{2i}$ (kW)	$n_2$ (r/min)	i	$M_{2i}$ (Nm)	$F_{2i}$ (N)	f <sub>s</sub>		
0.09	1.6	900	177	4840	0.7	DRV030/050	5624
	1.6	900	188	6270	1.0		
	1.2	1200	222	6270	0.9	DRV030/063	5624
	0.9	1500	259	6270	0.7		
	0.9	1500	305	7380	1.1		
	0.8	1800	331	7380	1.0	DRV040/075	5624
	0.6	2400	400	7380	0.7		
	0.5	3000	494	8180	0.9	DRV040/090	5624
	0.4	4000	589	8180	0.8		
	4.7	300	112	4840	1.2		
0.12	3.5	400	138	4840	0.9	DRV030/050	6314
	2.8	500	160	4840	0.7		
	2.8	500	168	6270	1.3		
	2.3	600	199	6270	1.1	DRV030/063	6314
	1.9	750	217	6270	0.9		
	1.6	900	279	7380	1.2	DRV040/075	6314
	1.2	1200	344	7380	0.9		
	0.8	1800	470	8180	0.9	DRV040/090	6314
	0.6	2400	593	8180	0.9		
	0.5	3000	731	10320	1.2		
0.18	0.4	4000	884	10320	1.0	DRV050/110	6314
	0.3	5000	1023	10320	0.8		
	3.5	400	216	6270	1.0	DRV030/063	6324
	2.8	500	252	6270	0.8		
	2.3	600	336	7380	1.1		
	1.9	750	371	7380	0.9	DRV040/075	6324
	1.6	900	419	7380	0.8		
	1.2	1200	544	8180	1.0	DRV040/090	6324
	0.9	1500	647	8180	0.8		
	0.8	1800	727	10320	1.5	DRV050/110	6324
0.25	0.6	2400	948	10320	1.1		
	7.0	400	150	6270	1.4	DRV030/063	6322
	5.6	500	175	6270	1.2		
	3.5	400	321	7380	1.1	DRV040/075	7114
	2.8	500	375	7380	0.8		
	2.3	600	488	8180	1.2		
	1.9	750	553	8180	0.9	DRV040/090	7114
	1.6	900	612	8180	0.8		
	1.2	1200	776	10320	1.3	DRV050/110	7114

**R系列 蝶輪減速機**  
**R Series RV Gear Motor**

**DRV性能參數 Performance parameter**

$P_{z1}$ (kW)	$n_z$ (r/min)	i	$M_{z1}$ (Nm)	$F_{z2}$ (N)	f <sub>s</sub>		
0.25	0.9	1500	924	10320	1.2	<b>DRV050/110</b>	7114
	0.8	1800	1010	10320	1.1		
	0.6	2400	1358	13500	1.0		
	0.5	3000	1626	13500	0.8		
	0.4	4000	1910	13500	0.6		
	0.3	5000	2132	13500	0.5		
	0.8	1800	1199	18000	1.8	<b>DRV063/130</b>	7114
	0.6	2400	1446	18000	1.8		
	0.5	3000	1713	18000	1.4		
	0.4	4000	2026	18000	0.9		
	0.3	5000	2251	18000	0.7		
0.37	9.3	300	182	6270	1.3	<b>DRV030/063</b>	7112
	7.0	400	222	6270	1.0		
	4.7	300	383	7380	1.0		
	3.5	400	474	7380	0.7		
	4.7	300	406	8180	1.5	<b>DRV040/075</b>	7124
	3.5	400	505	8180	1.2		
	2.8	500	593	8180	0.9		
	2.3	600	722	8180	0.8		
	1.9	750	837	10320	1.3		
	1.6	900	928	10320	1.2		
	1.2	1200	1148	10320	0.8		
	0.9	1500	1444	13500	1.1	<b>DRV063/130</b>	7124
	0.8	1800	1586	13500	0.9		
	0.8	1800	1775	18000	1.2		
	0.6	2400	2141	18000	1.2		
	0.5	3000	2535	18000	0.9		
0.55	9.3	300	305	8180	2.0	<b>DRV040/090</b>	7122
	7.0	400	375	8180	1.5		
	5.6	500	441	8180	1.2		
	4.7	300	615	10320	2.0	<b>DRV050/110</b>	8014
	3.5	400	810	10320	1.4		
	2.8	500	938	10320	1.1		
	2.3	600	1096	10320	1.0		
	1.9	750	1244	10320	0.9		
	2.8	500	957	13500	1.6		
	1.9	750	1382	13500	1.2		
	1.2	1200	2057	13500	0.8		
	0.8	1800	2638	18000	0.8	<b>DRV063/150</b>	8014
	0.6	2400	3182	18000	0.6		

**R系列 蝶輪減速機**  
R Series RV Gear Motor

**DRV性能參數 Performance parameter**

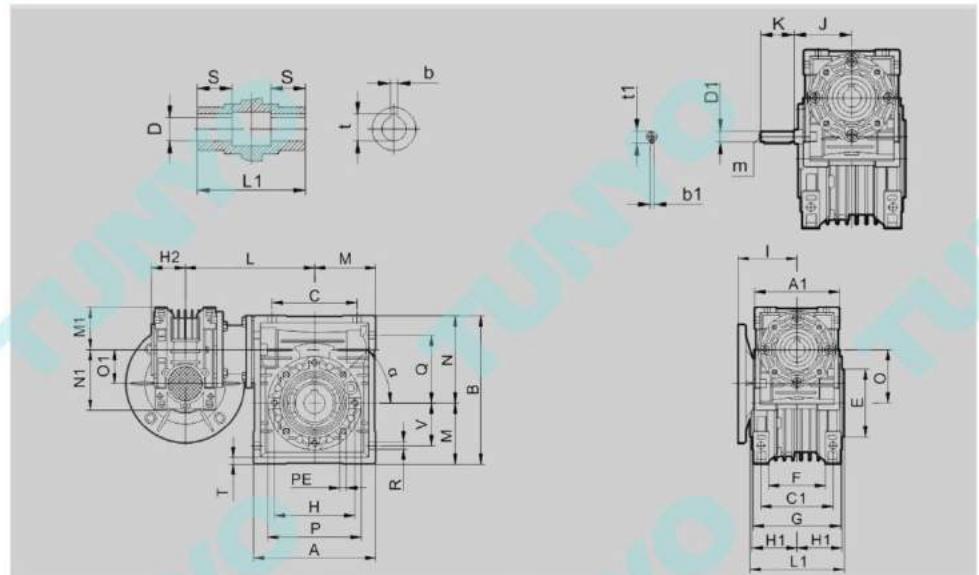
P <sub>o</sub> (kW)	n <sub>2</sub> (r/min)	i	M <sub>2r</sub> (Nm)	F <sub>2</sub> (N)	f <sub>s</sub>		
0.75	9.3	300	424	10320	2.8		8012
	7.0	400	553	10320	2.1		
	5.6	500	640	10320	1.6		
	4.7	300	838	10320	1.5		
	3.5	400	1105	10320	1.1		
	2.8	500	1305	13500	1.1		8024
	2.3	600	1557	13500	1.0		
	1.9	750	1772	13500	0.9		
	1.6	900	2014	13500	0.8		
	2.8	500	1291	18000	1.8		
1.1	2.3	600	1529	18000	1.7		8024
	1.9	750	1783	18000	1.3		
	1.6	900	2215	18000	0.9		
	1.2	1200	2680	18000	1		
	9.3	300	621	10320	1.9		8022
	7.0	400	810	10320	1.4		
	5.6	500	938	10320	1.1		
	4.7	300	1274	13500	1.3		
	3.5	400	1621	13500	1.0		
1.5	2.8	500	1913	13500	0.8		90S4
	9.3	150	753	18000	3.1		
	7	200	966	18000	2.4		
	5.6	250	1175	18000	1.7		
	4.7	300	1364	18000	1.7		
	3.5	400	1619	18000	1.6		90S4
	2.8	500	1893	18000	1.2		
	2.3	600	2242	18000	1.2		
	1.9	750	2616	18000	0.9		
	9.3	300	878	13500	1.9		90S2
	7.0	400	1105	13500	1.4		
	5.6	500	1305	13500	1.1		
	4.7	300	1737	13500	1.0		
	3.5	400	2210	13500	0.7		
2.2	9.3	150	1026	18000	2.3		90L4
	7	200	1317	18000	1.8		
	5.6	250	1602	18000	1.3		
	4.7	300	1860	18000	1.3		
	3.5	400	2208	18000	1.2		
	2.8	500	2582	18000	0.9		
	2.3	600	3057	18000	0.9		

R系列 蝶輪減速機  
R Series RV Gear Motor

**DRV**  
雙級蝶輪減速機  
Single stage worm reducer  
法蘭輸入/軸輸入  
減速比1:100~5000



外形尺寸 Dimension



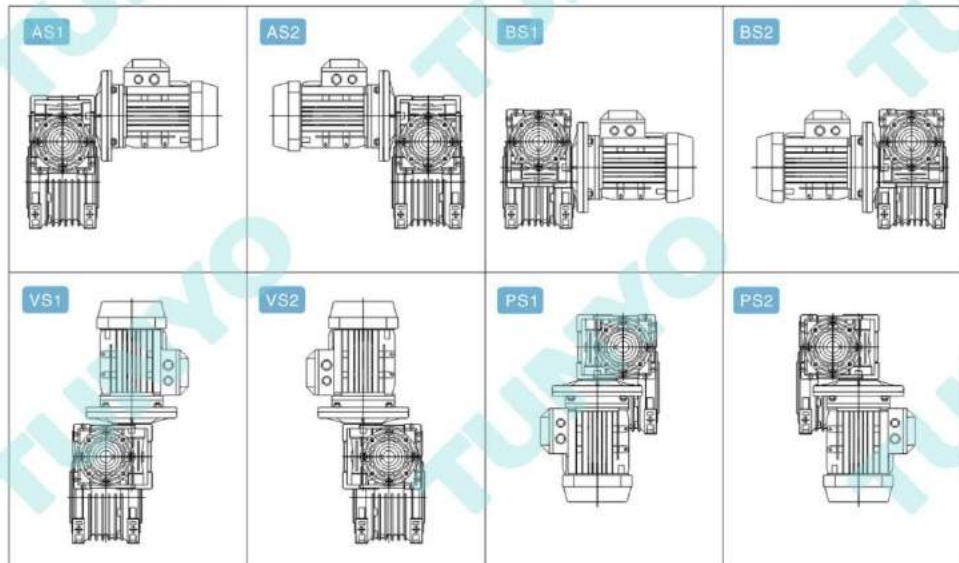
DRV	A	A1	B	C	C1	D(H7)	D1(y6)	E(h8)	F	G	H	H1	H2	I	J	K	L	L1	M	M1
025/030	80	70	97	54	44	14	-	55	32	56	65	29	22.5	45	-	-	100	63	40	35
025/040	100	70	121.5	70	60	18(19)	-	60	43	71	75	36.5	22.5	45	-	-	115	78	50	35
030/040	100	80	121.5	70	60	18(19)	9	60	43	71	75	36.5	29	55	51	20	120	78	50	40
030/050	120	80	144	80	70	25(24)	9	70	49	85	85	43.5	29	55	51	20	130	92	60	40
030/063	144	80	174	100	85	25(28)	9	80	67	103	95	53	29	55	51	20	145	112	72	40
040/075	172	100	205	120	90	28(35)	11	95	72	112	115	57	36.5	70	60	23	165	120	86	50
040/090	206	100	238	140	100	35(38)	11	110	74	130	130	67	36.5	70	60	23	182	140	103	50
050/110	255	120	295	170	115	42	14	130	-	144	165	74	43.5	80	74	30	225	155	127.5	60
063/130	293	144	335	200	120	45	19	180	-	155	215	81	53	95	90	40	245	170	146.5	72
063/150	340	144	400	240	145	50	19	180	-	185	215	96	53	95	90	40	275	200	170	72

DRV	N	N1	O	O1	P	Q	R	S	V	PE	a	b	b1	t	t1	m	Kg
025/030	57	48	30	25	75	44	6.5	21	27	M6×10(n=4)	0°	5	-	16.3	-	-	32.5
025/040	71.5	48	40	25	87	55	6.5	26	35	M6×10(n=4)	45°	6	-	20.8(21.8)	-	-	43
030/040	71.5	57	40	30	87	55	6.5	26	35	M6×10(n=4)	45°	6(6)	3	20.8(21.8)	10.2	-	43
030/050	84	57	50	30	100	64	8.5	30	40	M8×10(n=4)	45°	8(8)	3	28.3(27.3)	10.2	-	53.5
030/063	102	57	63	30	110	80	8.5	36	50	M8×14(n=8)	45°	8(8)	3	28.3(31.3)	10.2	-	53.5
040/075	119	71.5	75	40	140	93	11	40	60	M8×14(n=8)	45°	8(10)	4	31.3(38.3)	12.5	-	63.5
040/090	135	71.5	90	40	160	102	13	45	70	M10×18(n=8)	45°	10	4	38.3(41.3)	12.5	-	84.5
050/110	167.5	84	110	50	200	125	14	50	85	M10×18(n=8)	45°	12	5	45.3	16	-	84.5
063/130	187.5	102	130	63	250	140	16	60	100	M12×21(n=8)	45°	14	6	48.8	21.5	M6	85
063/150	230	102	150	63	250	180	18	72.5	120	M12×21(n=8)	45°	14	6	53.8	21.5	M6	87

R系列 蜗輪減速機  
R Series RV Gear Motor

安裝方位圖 Installation positions diagram

◆ DRV.. 安裝方位 Mounting positions



如果没有特殊要求，一般按出厂标准位置如图AS2组合方式和B3位置提供。

Unless specified otherwise, the gear units is supplied with the flange in pos. AS2 referred to position B3.

◆ 旋转方向 Direction of rotation



**TUNYO**



## 東洋PC+NMRV減速機

TUNYO PC+NMRV REDUCER

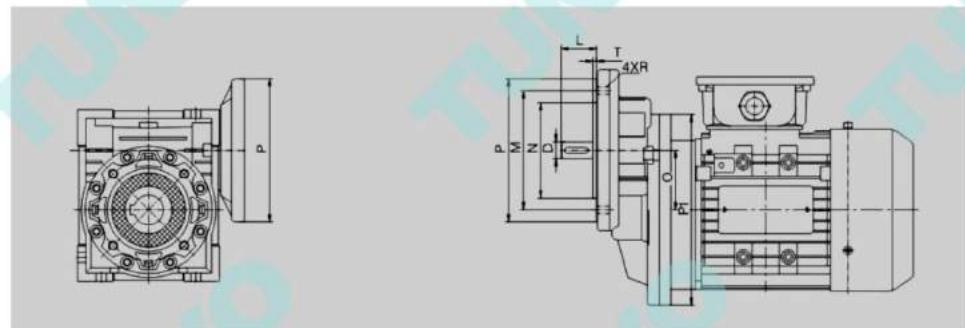
PROFESSIONAL MANUFACTURER OF POWER TRANSMISSION

DESIGN PHILOSOPHY: To follow the law, but always beyond.

BUSINESS PHILOSOPHY: Design for customer demand , dedication for customer satisfaction

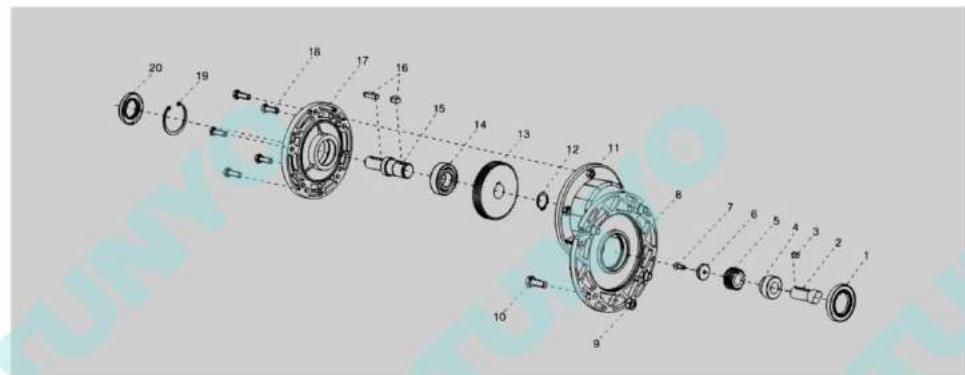
**R系列PC+NMRV減速機**  
**R Series PC+NMRV Motor**

**PC減速機接口尺寸 PC connection size**



TYPE	D(ΦD)	N(Φ)	M	O	P	P1	R	T	L
PC63	11(14)	70	85	40	105	140(63B5)	m6	3	23
PC71	14(19)	80	100	48	120	160(71B5)	m6		30
PC80	19(24/28)	110	130	62	160	200(80B5)	m8		40
PC90	24(19/28)	110	130	62	160	200(90B5)	m8		50

**PC結構分解圖 PC structure diagram**



1	油封 (Oil seal)	6	垫片 (Shim)	11	六角螺母 (Hexagon nuts)	16	平键 (Parallel key)
2	电机轴 (Shaft PAM)	7	螺栓 (Bolt)	12	轴用弹性挡圈 (Circlip for shaft)	17	输出端盖 (Output cover)
3	平键 (Parallel key)	8	前置齿轮箱体 (Pre-stage unit case)	13	大齿轮 (Gear)	18	螺栓 (Bolt)
4	轴套 (Shaft liner)	9	六角螺母 (Hexagon nuts)	14	轴承 (Bearing)	19	孔用弹性挡圈 (Circlip for hole)
5	小齿轮 (small pinion)	10	螺栓 (Bolt)	15	输出轴 (Low speed shaft)	20	油封 (Oil seal)

R系列PC+NMRV減速機  
R Series PC+NMRV Motor

減速器選型表 Gear unit selection tables

◆PC+NMRV性能參數

P <sub>in</sub> (kw)	n <sub>o</sub> (r/min)	i	M <sub>a</sub> (NM)	F <sub>z</sub> (N)	f <sub>r</sub>	Reducer	Motor
0.12	18.7	75	42	2833	1.2	PC63-NMRV040	6314
	15.6	90	46	3011	1.2		
	11.7	120	57	3314	0.9		
	9.3	150	66	3490	0.7		
	7.8	180	74	3490	0.6		
	9.3	150	68	4840	1.3		
	7.8	180	78	4840	1.1		
	5.8	240	88	4840	0.8		
	4.7	300	98	4840	0.7		
	5.8	240	92	6270	1.5		
0.18	4.7	300	103	6270	1.2	PC63-NMRV063	6314
	18.7	75	64	2833	0.8		
	15.6	90	70	3011	0.8		
	11.7	120	85	3314	0.6		
	18.7	75	64	3889	1.4		
	15.6	90	71	4132	1.5		
	11.7	120	87	4548	1.1		
	9.3	150	101	4840	0.9		
	7.8	180	113	4840	0.7		
	5.8	240	133	4840	0.6		
0.25	9.3	150	103	6270	1.7	PC63-NMRV063	6324
	7.8	180	117	6270	1.4		
	5.8	240	139	6270	1.0		
	4.7	300	155	6270	0.8		
	12.0	75	95	4506	1.2		
	10.0	90	105	4788	1.4		
	7.5	120	126	4840	1.0		
	12.0	75	97	5889	2.2		
	10.0	90	107	6259	2.4		
	7.5	120	131	6270	1.8		
0.37	6.0	150	152	6270	1.4	PC71-NMRV050	7116
	5.0	180	168	6270	1.2		
	3.8	240	197	6270	0.9		
	3.0	300	218	6270	0.7		
	5.0	180	179	7380	1.7		
	3.8	240	211	7380	1.2		
	3.0	300	235	7380	1.0		
	12.0	75	135	5889	1.6		
	10.0	90	148	6259	1.8		
	18.7	75	88	3889	1.0		
0.55	15.6	90	98	4132	1.1	PC71-NMRV063	7114
	11.7	120	121	4548	0.8		
	18.7	75	91	5083	1.8		
	15.6	90	100	5401	2.0		
	11.7	120	125	5945	1.5		
	9.3	150	143	6270	1.2		
	7.8	180	163	6270	1.0		
	5.8	240	192	6270	0.7		
	4.7	300	215	6270	0.6		
	12.0	75	135	5889	1.6		
0.75	10.0	90	148	6259	1.8	PC71-NMRV063	7126
	18.7	75	88	3889	1.0		

**R系列PC+NMRV減速機**  
**R Series PC+NMRV Motor**

P <sub>in</sub> (kw)	n <sub>s</sub> (r/min)	i	M <sub>2b</sub> (NM)	F <sub>2s</sub> (N)	f <sub>2</sub>	Reducer	Motor
0.25	7.5	120	181	6270	1.3	PC71-NMRV063	7126
	6.0	150	211	6270	1.0		
	9.3	150	151	7380	1.7	PC71-NMRV075	7114
	7.8	180	172	7380	1.4		
	5.8	240	201	7380	1.1		
	4.7	300	230	7380	0.9		
	12.0	75	139	6952	2.4	PC71-NMRV075	7126
	10.0	90	155	7380	2.5		
	7.5	120	191	7380	1.9		
	6.0	150	219	7380	1.5		
	5.0	180	248	7380	1.2	PC71-NMRV090	7126
	5.0	180	263	8180	1.9		
	3.8	240	318	8180	1.4		
	3.0	300	358	8180	1.1	PC71-NMRV063	7124
	18.7	75	134	5083	1.2		
	15.6	90	148	5401	1.4		
	11.7	120	185	5945	1.0		
	9.3	150	212	6270	0.8		
0.37	18.7	75	138	6000	1.8	PC71-NMRV075	7124
	15.6	90	154	6375	1.9		
	11.7	120	191	7017	1.5		
	9.3	150	223	7380	1.1		
	7.8	180	254	7380	0.9		
	12.0	75	206	6952	1.6	PC80-NMRV075	8016
	10.0	90	230	7380	1.7		
	7.5	120	283	7380	1.3		
	6.0	150	324	7380	1.0		
	7.8	180	268	8180	1.5	PC71-NMRV090	7124
	5.8	240	321	8180	1.1		
	4.7	300	371	8180	0.9		
	6.0	150	347	8180	1.6	PC80-NMRV090	8016
	5.0	180	389	8180	1.3		
	3.8	240	471	8180	1.0		
	3.8	240	509	10320	1.6	PC80-NMRV110	8016
	3.0	300	577	10320	1.3		
0.55	18.7	75	205	6000	1.2	PC80-NMRV075	8014
	15.6	90	230	6375	1.3		
	11.7	120	284	7017	1.0		
	9.3	150	332	7380	0.8	PC80-NMRV075	8026
	12.0	75	306	6952	1.1		
	10.0	90	341	7380	1.1		
	15.6	90	240	7054	2.3	PC80-NMRV090	8014
	11.7	120	297	7764	1.6		
	9.3	150	355	8180	1.3		
	7.8	180	398	8180	1.0		
	10.0	90	357	8174	2.0	PC80-NMRV090	8026
	7.5	120	441	8180	1.4		

**R系列PC+NMRV減速機**  
**R Series PC+NMRV Motor**

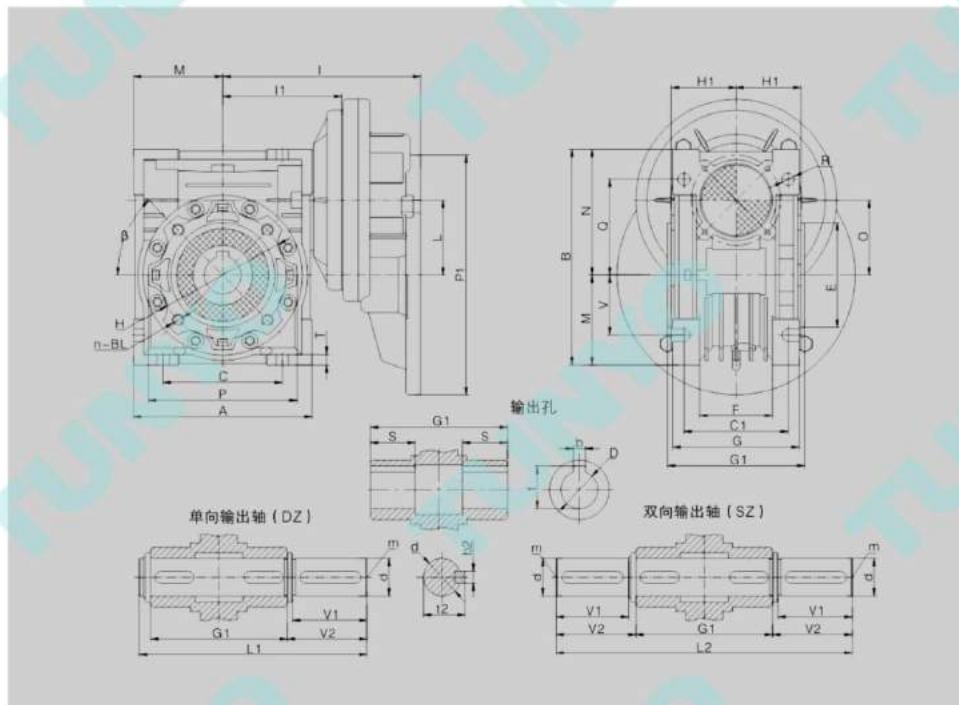
P <sub>in</sub> (kw)	n <sub>o</sub> (r/min)	i	M <sub>in</sub> (NM)	F <sub>z</sub> (N)	f <sub>s</sub>	Reducer	Motor	
0.55	7.8	180	425	10320	1.8	PC80-NMRV110	8014	
	5.8	240	513	10320	1.3			
	4.7	300	597	10320	1.0			
	7.5	120	462	10320	2.6			
	6.0	150	552	10320	2.0			
	5.0	180	620	10320	1.6	PC80-NMRV110	8026	
	3.8	240	756	10320	1.1			
	3.8	240	756	13500	1.6			
	3.0	300	858	13500	1.3			
	0.75	18.7	75	280	6000	0.9	PC80-NMRV075	8024
		15.6	90	313	6375	1.0		
		15.6	90	327	7054	1.7		
		11.7	120	405	7764	1.2		
		9.3	150	483	8180	0.9		
		7.8	180	543	8180	0.7		
		11.7	120	430	9811	2.2		
		9.3	150	506	10320	1.7	PC80-NMRV110	8024
		7.8	180	580	10320	1.3		
		5.8	240	700	10320	0.9		
		12.4	73	393	9614	3.2		
		9.3	96.8	508	10320	2.3		
		7.4	121	607	10320	1.8		
		6.2	145.2	682	10320	1.5		
	1.1	4.6	193.6	832	10320	1.0	PC90-NMRV110	90S6
		5.8	240	712	13500	1.4		
		4.7	300	813	13500	1.1		
		12.4	73	399	12575	4.4		
		9.3	96.8	508	13500	3.2		
		7.4	121	607	13500	2.6		
		6.2	145.2	682	13500	2.1		
		4.6	193.6	832	13500	1.5	PC80-NMRV130	8024
		3.7	242	944	13500	1.2		
		12.4	73	576	9614	2.2		
		9.3	96.8	746	10320	1.6		
		7.4	121	890	10320	1.2		
		6.2	145.2	1000	10320	1.0		
		19.3	73	392	8298	2.5		
	1.1	14.5	96.8	508	9133	1.8	PC90-NMRV110	90S4
		11.6	121	599	9838	1.5		
		9.6	145.2	686	10320	1.1		
		7.2	193.6	828	10320	0.8		
		12.4	73	585	12575	3.0		
		9.3	96.8	746	13500	2.2		
		7.4	121	890	13500	1.7		
		6.2	145.2	1000	13500	1.4	PC90-NMRV130	90S4
		4.6	193.6	1220	13500	1.0		
		19.3	73	396	10853	3.5		
		14.5	96.8	508	11945	2.6		
		11.6	121	608	12868	2.0		

**R系列PC+NMRV減速機**  
**R Series PC+NMRV Motor**

P <sub>in</sub> (kW)	n <sub>o</sub> (r/min)	i	M <sub>b</sub> (NM)	F <sub>z</sub> (N)	f <sub>s</sub>	Reducer	Motor
1.1	9.6	145.2	686	13500	1.6	PC90-NMRV130	90S4
	7.2	193.6	843	13500	1.2		
	5.8	242	962	13500	0.9		
1.5	19.3	73	535	8298	1.9	PC90-NMRV110	90L4
	14.5	96.8	693	9133	1.3		
	11.6	121	817	9838	1.1		
	9.6	145.2	936	10320	0.8		
	19.3	73	542	10853	2.6		PC90-NMRV130
	14.5	96.8	693	11945	1.9		
	11.6	121	830	12868	1.5		
	9.6	145.2	936	13500	1.1		
2.2	7.2	194	1149	13500	0.8	PC90-NMRV110	90L2
	38.6	73	398	6586	2.1		
	26.9	96.8	516	7249	1.5		
	23.1	121	617	7809	1.2	PC90-NMRV130	90L2
	38.6	73	409	8614	2.9		
	26.9	96.8	545	9481	2.0		
	23.1	121	654	10213	1.6		
	19.3	145.2	752	10853	1.3		

R系列PC+NMRV減速機  
R Series PC+NMRV Motor

PC+NMRV安裝尺寸 PC+NMRV size



PC-NMRV	A	B	C	C1	D(H7)	E(h8)	F	G	G1	H	H1	I	I1	L	L1	L2	M	N	O	P	P1	Q	R
63-040	100	121.5	70	60	18(19)	60	43	71	78	75	36.5	115	70	40	128	164	50	71.5	40	87	140	55	6.5
63-050	120	144	80	70	25(24)	70	49	85	92	85	43.5	125	80	40	153	199	60	84.0	50	100	140	64	8.5
63-063	144	174	100	85	25(28)	80	67	103	112	95	53.0	140	95	40	173	219	72	102	63	110	140	80	8.5
71-050	120	144	80	70	25(24)	70	49	85	92	85	43.5	133	80	48	153	199	60	84.0	50	100	160	64	8.5
71-063	144	174	100	85	25(28)	80	67	103	112	95	53.0	148	95	48	173	219	72	102	63	110	160	80	8.5
71-075	172	205	120	90	28(35)	95	72	112	120	115	57.0	165.5	112.5	48	192	247	86	119	75	140	160	93	11
71-090	206	238	140	100	35(38)	110	74	130	140	130	67.0	182.5	129.5	48	234	309	103	135	90	160	160	102	13
80-075	172	205	120	90	28(35)	95	72	112	120	115	57.0	182	112.5	62	192	247	86	119	75	140	200	93	11
80-090	206	238	140	100	35(38)	110	74	130	140	130	67.0	199	129.5	62	234	309	103	135	90	160	200	102	13
80(90)-110	255	295	170	115	42	130	/	144	155	165	74.0	229.5	160	62	249	324	127.5	167.5	110	200	200	125	14
80(90)-130	293	335	200	120	45	180	/	155	170	215	81.0	248.5	179	62	265	340	147.5	187.5	130	250	200	140	16

PC-NMRV	S	T	BL	$\beta$	b	b2	t	t2	d(h6)	m	V	V1	V2
63-040	26	6.5	M6X8(n=4)	45°	6(6)	6	20.8(21.8)	20.5	18	M6	35	40	43.0
63-050	30	7	M8X10(n=4)	45°	8(8)	8	28.3(27.3)	28.0	25	M10	40	50	53.5
63-063	36	8	M8X14(n=8)	45°	8(8)	8	28.3(31.3)	28.0	25	M10	50	50	53.5
71-050	30	7	M8X10(n=4)	45°	8(8)	8	28.3(27.3)	28.0	25	M10	40	50	53.5
71-063	36	8	M8X14(n=8)	45°	8(8)	8	28.3(31.3)	28.0	25	M10	50	50	53.5
71-075	40	10	M8X14(n=8)	45°	8(10)	8	31.3(38.3)	31.0	28	M10	60	60	63.5
71-090	45	11	M10X18(n=8)	45°	10(10)	10	38.3(41.3)	38.0	35	M12	70	80	84.5
80-075	40	10	M8X14(n=8)	45°	8(10)	8	31.3(38.3)	31.0	28	M10	60	60	63.5
80-090	45	11	M10X18(n=8)	45°	10(10)	10	38.3(41.3)	38.0	35	M12	70	80	84.5
80(90)-110	50	14	M10X18(n=8)	45°	12	12	45.3	48.5	42	M16	85	80	84.5
80(90)-130	60	15	M12X21(n=8)	45°	14	14	48.8	53.5	45	M16	100	80	85.0

# TUNYO®



C·C·C 認證取證

CERTIFICATE OF APPROVAL CCC



C·E 認證取證

CERTIFICATE OF APPROVAL CE



RoHS 認證取證

CERTIFICATE OF APPROVAL RoHS



ISO 9001 認證取證

CERTIFICATE OF APPROVAL ISO9001

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